

ADSL 2/2+ Router with USB Port

ADE-3410

User's Manual

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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio technician for help.

FCC Caution

To assure continued compliance (example-use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the Following two conditions: (1) This device may not cause harmful interference, and (2) this Device must accept any interference received, including interference that may cause undesired operation.

Federal Communication Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

R&TTE Compliance Statement

This equipment complies with all the requirements of DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF 9 March 1999 on radio equipment and telecommunication terminal Equipment and the mutual recognition of their conformity (R&TTE)

The R&TTE Directive repeals and replaces in the directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) As of April 8, 2000.

WEEE Regulation



To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

Revision

User's Manual for Wired / Wireless ADSL 2/2+ Router

Model: ADE-3410v3

Rev: 1.0 (July 2008)

Part No. EM-ADE3410v3

Table of Contents

1. Introduction	6
1.1 Feature	6
1.2 Package Contents.....	7
1.3 Physical Details.....	7
2. Installation.....	9
2.1 System Requirement	9
2.2 Hardware Installation	9
2.3 Configuring the Network Properties	10
3. Web Configuration Management	14
3.1 ADSL Router Status.....	15
3.1.1 System Status.....	15
3.1.2 LAN Status.....	16
3.1.3 WAN Status	16
3.1.4 Port Mapping.....	17
3.1.5 Statistic	17
3.1.6 ARP Table.....	18
3.2 Wizard.....	19
3.3 LAN.....	22
3.3.1 LAN Interface Settings	22
3.3.2 DHCP Server Settings	23
3.4 WAN	25
3.4.1 WAN Interface.....	25
3.4.2 ATM Settings	28
3.4.3 ADSL Settings.....	29
3.5 Advance	30
3.5.1 DNS	30
3.5.2 Firewall	32
3.5.2.1 IP/Port filtering	32
3.5.2.2 MAC Filtering	34
3.5.2.3 URL Block	36
3.5.3 Virtual Server	37
3.5.3.1 Services	37

3.5.3.2 DMZ	38
3.5.4 Routing	38
3.5.4.1 RIP	38
3.5.4.2 Static Route	39
3.5.5 IP QoS	40
3.5.6 Anti-DoS	42
3.5.7 Port Mapping.....	43
3.5.8 Other.....	44
3.5.8.1 IGMP Proxy.....	44
3.5.8.2 UPnP.....	44
3.5.8.3 Bridge.....	45
3.6 Admin.....	46
3.6.1 Remote Access.....	46
3.6.2 Commit / Reboot.....	46
3.6.3 Password	47
3.6.4 Backup / Restore	48
3.6.5 Upgrade Firmware	48
3.6.6 Time Zone.....	49
3.6.7 System Log.....	50
3.6.8 SNMP	51
3.6.9 TR-069.....	52
3.6.10 ACL.....	52
3.7 Diagnostic	53
3.7.1 Ping.....	53
3.7.2 ATM Loopback.....	53
3.7.3 ADSL	54
3.7.4 Diagnostic	55
Appendix A: Glossary	56

1. Introduction

The PLANET ADSL 2/2+ Router, ADE-3410, provides office and residential users the ideal solution for sharing a high-speed ADSL 2/2+ broadband Internet connection on one Ethernet port and one USB port. It can support downstream transmission rates of up to 24Mbps and upstream transmission rates of up to 3.5Mbps. The product supports PPPoA (RFC 2364 - PPP over ATM Adaptation Layer 5), PPP over Ethernet (RFC 2516), and RFC 1483 encapsulation over ATM (MER, bridged or routed) to establish a connection with ISP.

Via the user-friendly management interface, ADE-3410 can be managed by workstations running standard web browsers. Furthermore, ADE-3410 provides DHCP server, NAT, Virtual Server, DMZ, Access Control, IP Filter, PPTP/IPSec/L2TP pass-through, DDNS, and UPnP capability.

The ADE-3410 also serves as an Internet firewall, protecting your network from being accessed by outside users. It provides the natural firewall function (Network Address Translation, NAT). All incoming and outgoing IPs are monitored and filtered. Moreover, it can be configured to block internal users from accessing to the Internet.

1.1 Feature

Internet Access Features

- ♦ **Shared Internet Access** All users on the LAN can access the Internet through the ADE-3410 using only a single external IP Address. The local (invalid) IP Addresses are hidden from external sources. This process is called NAT (Network Address Translation).
- ♦ **Built-in ADSL 2/2+ Modem** The ADE-3410 provides ADSL 2/2+ modem, and supports all common ADSL connections.
- ♦ **PPPoE, PPPoA, Direct Connection Support** Various WAN connections are supported by ADE-3410.
- ♦ **Auto-detection of Internet Connection Method** In most situations, the ADE-3410 can test your ADSL and Internet connection to determine the connection method used by your ISP.
- ♦ **Fixed or Dynamic IP Address** On the Internet (WAN port) connection, the ADE-3410 supports both Dynamic IP Address (IP Address is allocated on connection) and Fixed IP Address.

Advanced Internet Functions

- ♦ **Virtual Servers** This feature allows Internet users to access Internet servers on your LAN. The required setup is quick and easy.
- ♦ **DMZ Support** The ADE-3410 can translate public IP addresses to private IP address to allow unrestricted 2-way communication with Servers or individual users on the Internet. This provides the most flexibility to run programs, which could be incompatible in NAT environment.
- ♦ **Firewall** Supports simple firewall with NAT technology and provides option for access control from Internet, like Telnet, FTP, TFTP, HTTP, SNMP, and ICMP services. It also supports MAC and IP filtering.
- ♦ **Universal Plug and Play (UPnP)** UPnP allows automatic discovery and configuration of the Broadband Router. UPnP is supported by Windows ME, XP, or later.

- ♦ **Dynamic DNS Support** DDNS, when used with the Virtual Servers feature, allows users to connect to Servers on your LAN using a Domain Name, even if you have a dynamic IP address which changes every time you connect.
- ♦ **VPN Pass through Support** PCs with VPN (Virtual Private Networking) software using PPTP, L2TP, and IPSec are transparently supported - no configuration is required.
- ♦ **RIP Routing** It supports RIPv1/2 routing protocol for routing capability.
- ♦ **Simple Network Management Protocol (SNMP)** It is an easy way to remotely manage the router via SNMP.

LAN Features

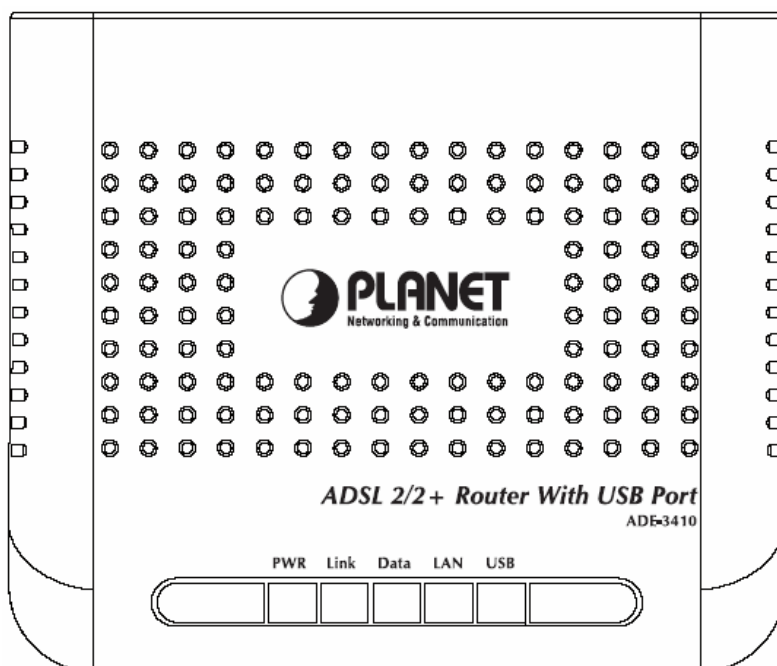
- ♦ **Dual-Port** The ADE-3410 incorporates on one Ethernet port and one USB port, making it easy to create or extend your LAN.
- ♦ **DHCP Server Support** Dynamic Host Configuration Protocol provides a dynamic IP address to PCs and other devices upon request. The ADE-3410 can act as a DHCP Server for devices on your local LAN.

1.2 Package Contents

- ADE-3410 Unit x 1
- CD-ROM x 1 (Include User's Manual, Quick Guide, and Driver)
- Quick Installation Guide
- ADSL Splitter x 1
- Power Adapter x 1
- RJ-11 (ADSL) Cable x 2
- RJ-45 Cable x 1
- USB Cable x 1

1.3 Physical Details

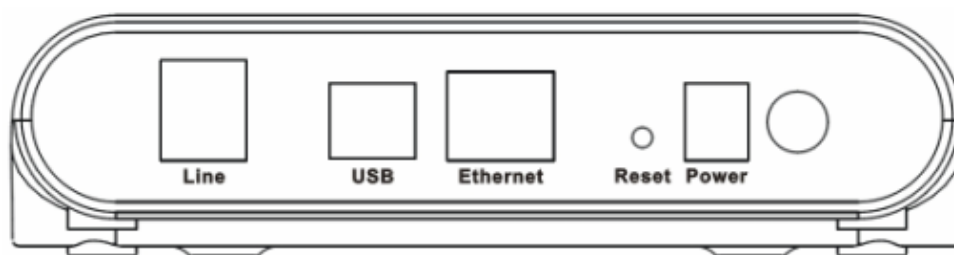
Front Panel of ADE-3410



Front Panel LED definition

LED		Meaning
1	PWR	Lit when power is ON.
2	Link	Lit when DSL line is connected. Blink when DSL line is training.
3	Data	Blink when DSL data is transferring.
4	LAN	Lit when connected to an Ethernet device. Blink when data is Transmitted / Received.
5	USB	Lit when the USB port is connected to the PC and working properly.

Rear Panel



Rear Panel Port and Button Definition

	Port	Meaning
1	Line	Connect the supplied RJ-11 ("telephone") cable to this port when connecting to the ADSL/telephone network.
2	USB	Connect the supplied USB cable to this port when connecting to the PC
3	Ethernet	Connect a UTP Ethernet cable (Cat-5 or Cat-5e) to one of the four LAN ports when connecting to a PC or an office / home network of 10Mbps or 100Mbps.
4	Reset	After the device is powered on, press it to reset the device or restore to factory default settings. Reset the device 6 seconds above to restore the factory default settings (this is used when you can not login to the router, e.g. forgot the password)
5	Power	Connect the supplied power adapter to this jack (10 DC, 1A).
6	Power Switch	Power ON / OFF switch

2. Installation

This chapter offers information about installing your router. If you are not familiar with the hardware or software parameters presented here, please consult your service provider for the values needed.

2.1 System Requirement

1. Personal computer (PC)
2. Pentium III 266 MHz processor or higher
3. 128 MB RAM minimum
4. 20 MB of free disk space minimum
5. RJ45 Ethernet Port

2.2 Hardware Installation

Please connect the device to you computer as follow:

- If connecting to the splitter, connect the “Line” splitter to wall jack using one RJ-11 cable
- Use another RJ-11 cable to connect “MODEM” port of the splitter and “LINE” port of the modem. The “phone” port of the splitter can be use to connect the telephone by a RJ-11 cable.
- Use Ethernet cable to connect “LAN” port of the modem and “LAN” port of your computer.

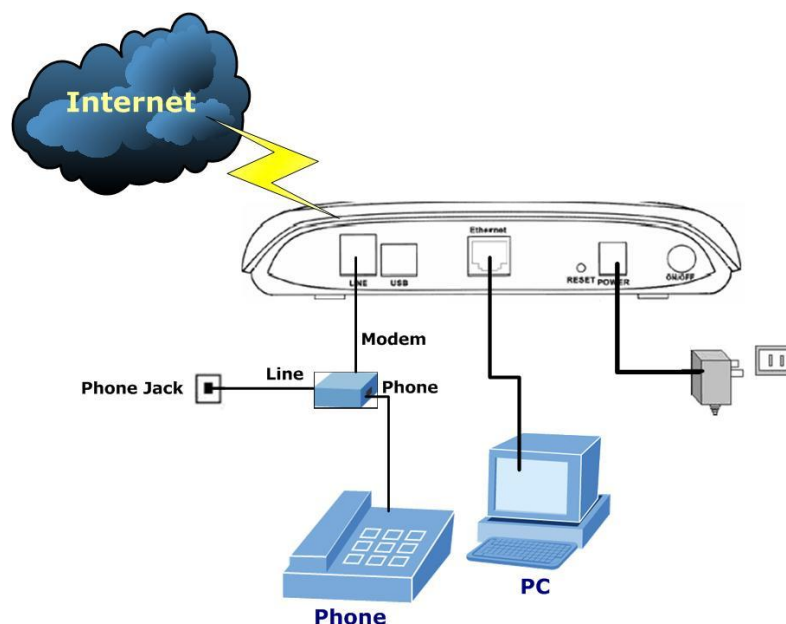


Figure 1 ADE-3410 connection diagram

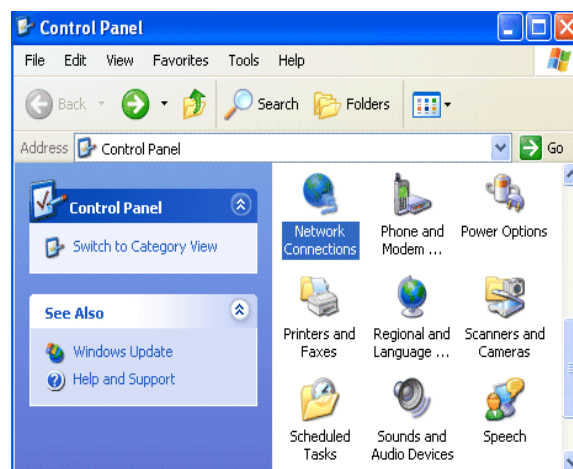
If do not need to connect to the splitter,

- Connect the modem to wall jack with a RJ-11 cable.
- Use Ethernet cable to connect “LAN” port of the modem and network adaptor of your computer.

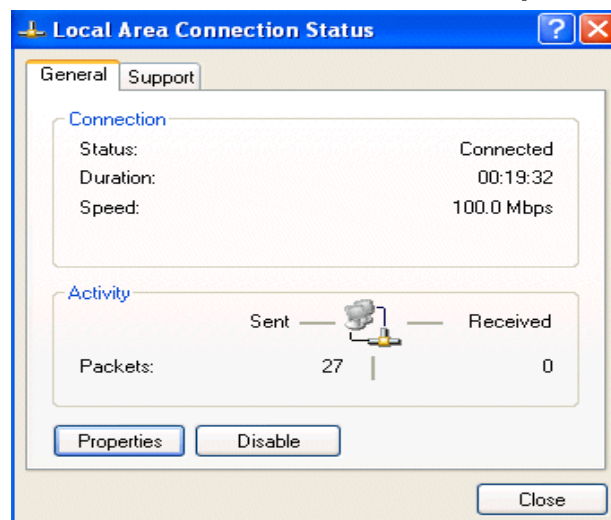
2.3 Configuring the Network Properties

Configuring PC in Windows XP

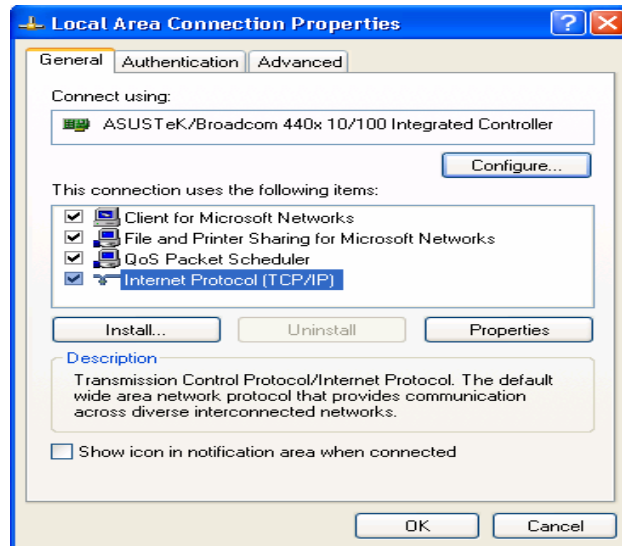
1. Go to **Start / Control Panel (in Classic View)**. In the Control Panel, double-click on **Network Connections**
2. Double-click **Local Area Connection**.



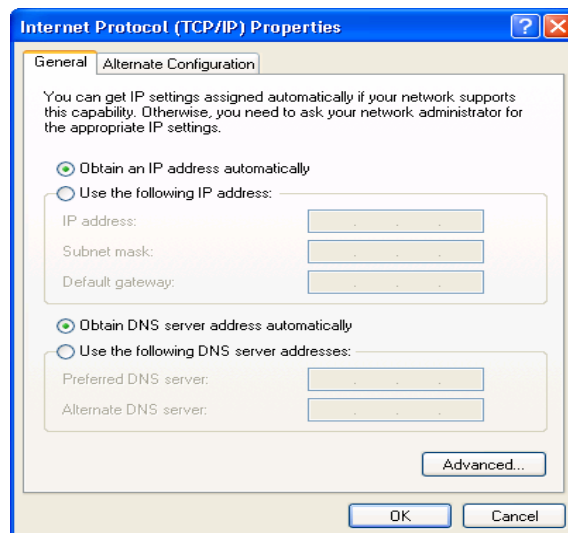
3. In the **Local Area Connection Status** window, click **Properties**.



4. Select **Internet Protocol (TCP/IP)** and click **Properties**.

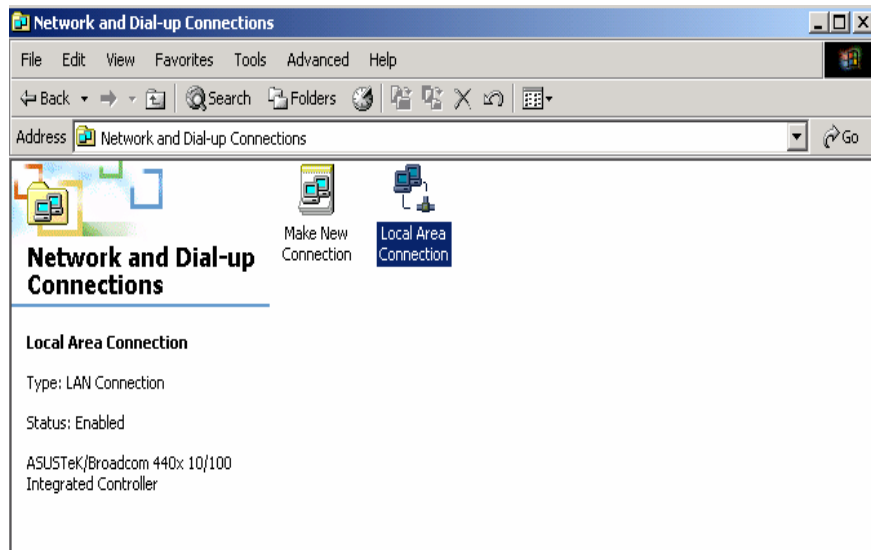


5. Select the **Obtain an IP address automatically** and the **Obtain DNS server address automatically** radio buttons.
6. Click **OK** to finish the configuration.

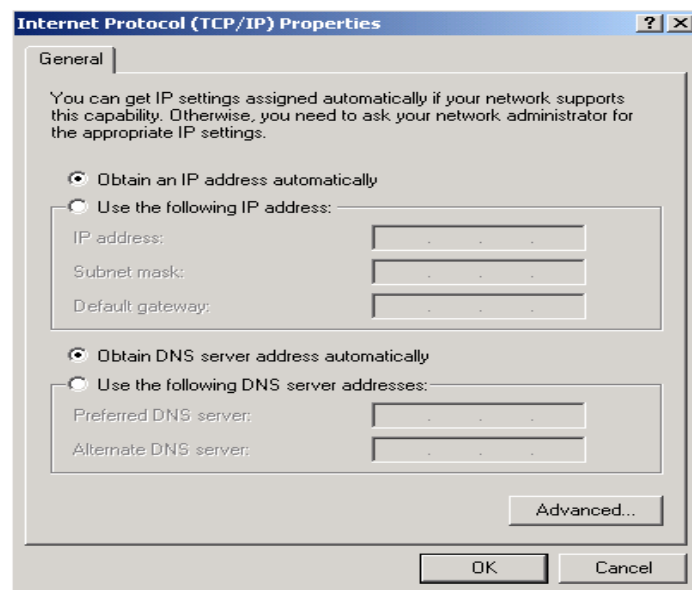


Configuring PC in Windows 2000

1. Go to **Start / Settings / Control Panel**. In the Control Panel, double-click on **Network and Dial-up Connections**.
2. Double-click **Local Area Connection**.

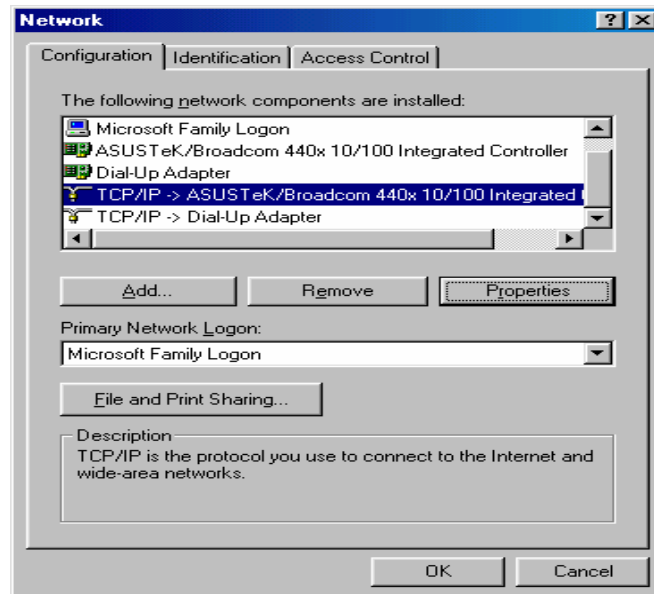


3. In the **Local Area Connection Status** window click **Properties**.
4. Select **Internet Protocol (TCP/IP)** and click **Properties**.
5. Select the **Obtain an IP address automatically** and the **Obtain DNS server address automatically** radio buttons.
6. Click **OK** to finish the configuration.

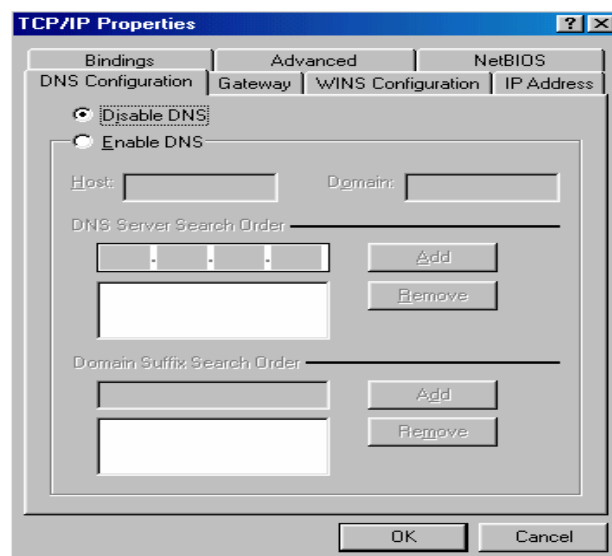


Configuring PC in Windows 98/Me

1. Go to **Start / Settings / Control Panel**. In the Control Panel, double-click on **Network** and choose the **Configuration** tab.
2. Select **TCP/IP → NE2000 Compatible**, or the name of your Network Interface Card (NIC) in your PC.



3. Select the **Obtain an IP address automatically** radio button.
4. Then select the **DNS Configuration** tab.
5. Select the **Disable DNS** radio button and click **OK** to finish the configuration.



3. Web Configuration Management

Determine your connection settings

Before you configure the router, you need to know the connection information supplied by your ADSL service provider.

Connecting the ADSL Router to your network

Unlike a simple hub or switch, the setup of the ADSL Router consists of more than simply plugging everything together. Because the Router acts as a DHCP server, you will have to set some values within the Router, and also configure your networked PCs to accept the IP Addresses the Router chooses to assign them.

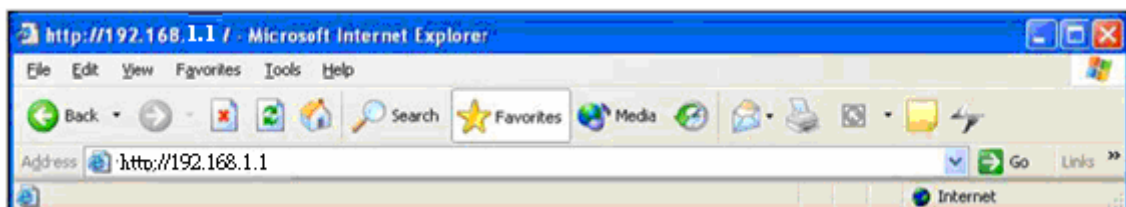
Generally there are several different operating modes for your applications. And you can know which mode is necessary for your system from ISP. These modes are router, bridge, PPPoE+NAT, and PPPoA+NAT.

Configuring with Web Browser

It is advisable to change the administrator password to safeguard the security of your network.

To configure the router, open your browser, type “**http: //192.168.1.1**” into the address bar and click “**Go**” to get to the login page.

Save this address in your Favorites for future reference.



At the User name prompt, type “**admin**”. And the Password prompts, type “**admin**”. You can change these later if you wish. Click “**OK**”.



Once you have powered on ADE-3410, system will boot up and connect to DSLAM automatically. In login dialog, enter “**admin**” as user name and “**admin**” as default password. After log in, you will see the following page. The default screen is **Wizard** setting screen. You can configure the device step by step.

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ADSL 2/2+ Router

Wizard Status **Wizard** LAN WAN Advance Admin Diagnostic

| Wizard |

Wizard

Wizard

This Wizard will guide you through the steps necessary to configure your DSL Router.
Note: This PVC will instead of the first original PVC.

ATM PVC Configuration

The Virtual Path Identifier (VPI) and Virtual Channel Identifier (VCI) are needed for setting up the ATM PVC.
Do not change VPI and VCI numbers unless your ISP instructs you otherwise.

VPI: (0-255)
VCI: (1-65535)

[Next >](#)

3.1 ADSL Router Status

The Status screen display system information of your Router. It includes the **System**, **LAN**, **WAN**, **Port Mapping**, **Statistic** and **ARP Table**. You can see the information of the router via these screens.

3.1.1 System Status

It shows the Firmware Version, WAN, LAN, ADSL, and MAC address information. Note that these fields are read-only and are not meant for diagnostic purposes.

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ADSL 2/2+ Router

WAN Status Wizard LAN **WAN** Advance Admin Diagnostic

| WAN Interface | ATM Settings | ADSL Settings |

WAN Interface

System Status

This page shows the current status and some basic settings of the device.

System	
Alias Name	ADSL Modem/Router
Firmware Version	1.4.0.02
DSP Version	2.9.0.0
DSL	
Mode	T1.413 G.Dmt ADSL2 ADSL2+
DSL Status	G.dmt, SHOWTIME.
Upstream Speed	64 kbps (Interleave)
Downstream Speed	1024 kbps (Interleave)
Upstream SNR	31.0dB
Downstream SNR	44.9dB
Reconnection Counts	0
Uptime	0 min
Showtime	< 1 min

3.1.2 LAN Status

You can see the LAN IP address, Mask, DHCP status, MAC and DHCP Client Table in this screen.

The screenshot shows the PLANET ADSL 2/2+ Router web interface. The top navigation bar includes 'Status', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. The 'LAN' tab is selected. Below the navigation bar, there is a breadcrumb trail: 'System | LAN | WAN | Port Mapping | Statistic | ARP Table |'. The main content area is titled 'LAN Status' and contains the text 'This page shows some basic status of LAN.' Below this, there are two tables. The first table is 'LAN Configuration' with the following data:

LAN Configuration	
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enabled
MAC Address	00304010203

The second table is 'DHCP Client Table' with the following data:

IP Address	MAC Address	Time Expired(s)
192.168.1.2	00:19:db:8e:d9:93	86392

3.1.3 WAN Status

You can see the VPI/VCI, Encapsulation type, Protocol, WAN IP address, Gateway and DNS information in this screen.

The screenshot shows the PLANET ADSL 2/2+ Router web interface. The top navigation bar includes 'Status', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. The 'WAN' tab is selected. Below the navigation bar, there is a breadcrumb trail: 'System | LAN | WAN | Port Mapping | Statistic | ARP Table |'. The main content area is titled 'WAN Status' and contains the text 'This page shows some basic status of WAN.' Below this, there is a table with the following data:

Interface	VPI/VCI	Encap	Protocol	IP Address	Gateway	Status
ppp0	0/33	LLC	PPPoE	203.67.104.106	203.67.104.1	up 0sec / 0sec <input type="button" value="Disconnect"/>
Default Gateway	203.67.104.1					
DNS Servers	139.175.55.244, 139.175.252.16					

3.1.4 Port Mapping

You can see the Port Mapping information in this screen. It includes the status and Mapping Relation.

The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes 'Status', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. The 'Status' tab is selected, and the 'Port Mapping' sub-tab is active. The main content area is titled 'Port Mapping' and contains the following text:

This page shows the mapping relation and the status of port mapping.

Status: **disabled**

Mapping Relation

Group	Interfaces
Default	eth0, usb0, ppp0
Group1	
Group2	
Group3	
Group4	

3.1.5 Statistic

You can see the Statistic information in this screen. It includes the Traffic and DSL statistic.

Traffic Statistic Screen

The screen shows the statistic of LAN, WLAN and WAN Port. Click the **Refresh** button to refresh the information.

The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes 'Status', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. The 'Status' tab is selected, and the 'Statistic' sub-tab is active. The main content area is titled 'Traffic Statistic' and contains the following text:

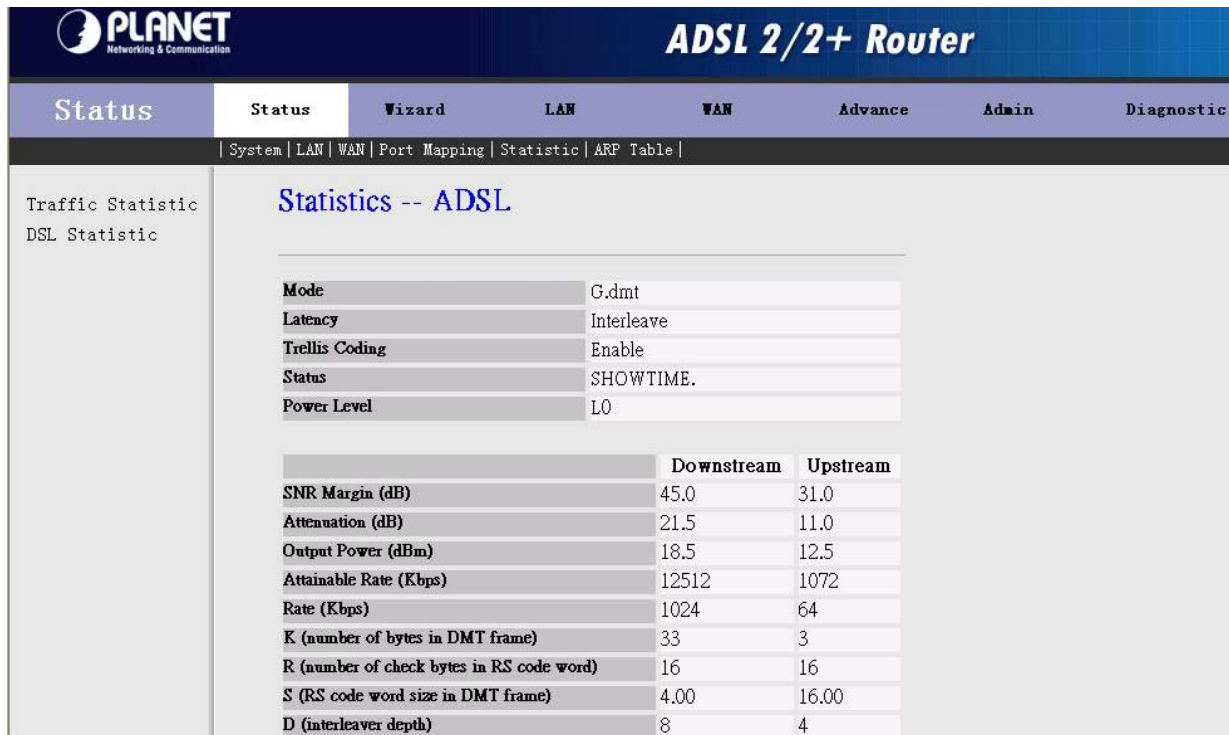
This page shows the packet statistics for transmission and reception regarding to network interface.

Interface	Rx pkt	Rx err	Rx drop	Tx pkt	Tx err	Tx drop
eth0	451	0	0	417	0	1
usb0	0	0	0	0	0	0
0_33	159	0	0	124	0	0

Refresh

DSL Statistic

The screen shows the ADSL line statistic.



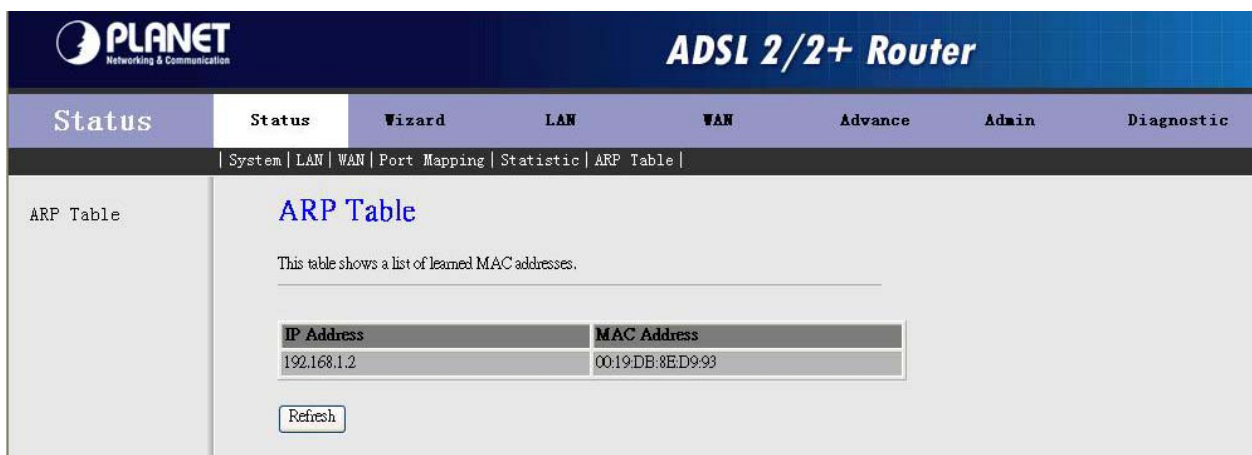
The screenshot shows the 'Status' page of an 'ADSL 2/2+ Router'. The left sidebar has 'DSL Statistic' selected. The main content area is titled 'Statistics -- ADSL' and displays two tables of DSL line statistics.

Mode	G.dmt
Latency	Interleave
Trellis Coding	Enable
Status	SHOWTIME.
Power Level	L0

	Downstream	Upstream
SNR Margin (dB)	45.0	31.0
Attenuation (dB)	21.5	11.0
Output Power (dBm)	18.5	12.5
Attainable Rate (Kbps)	12512	1072
Rate (Kbps)	1024	64
K (number of bytes in DMT frame)	33	3
R (number of check bytes in RS code word)	16	16
S (RS code word size in DMT frame)	4.00	16.00
D (interleaver depth)	8	4

3.1.6 ARP Table

You can see the ARP information in this screen. Click the **Refresh** button to refresh the information.



The screenshot shows the 'Status' page of an 'ADSL 2/2+ Router'. The left sidebar has 'ARP Table' selected. The main content area is titled 'ARP Table' and displays a table of learned MAC addresses. A 'Refresh' button is located below the table.

This table shows a list of learned MAC addresses.

IP Address	MAC Address
192.168.1.2	00:19:DB:8E:D9:93

3.2 Wizard

You can use "**Wizard**" to setup the router as follows, and the router will connect to the Internet via ADSL line.

Step 1. Click "**Wizard**" to get into the quick setup procedures. It will show the below screen. Enter the VPI / VCI value that provided by your ISP.

The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes 'Wizard', 'Status', 'Wizard' (active), 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. The main content area is titled 'Wizard' and contains the following text:

This Wizard will guide you through the steps necessary to configure your DSL Router.
Note: This PVC will instead of the first original PVC.

ATM PVC Configuration

The Virtual Path Identifier (VPI) and Virtual Channel Identifier (VCI) are needed for setting up the ATM PVC.
Do not change VPI and VCI numbers unless your ISP instructs you otherwise.

VPI: (0-255)
VCI: (1-65535)

A 'Next>' button is located at the bottom right of the configuration area.

Step 2. Click "**Next**" to select your WAN Connection Type. You can have this information from your Internet Service Provider.

The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes 'Wizard', 'Status', 'Wizard' (active), 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. The main content area is titled 'Wizard' and contains the following text:

Connection Type

Select the type of network protocol and encapsulation mode over the ATM PVC that your ISP has instructed you to use.

WAN Connection Type:

- ☐ PPP over ATM(PPPoA)
- ☒ PPP over Ethernet(PPPoE)
- ☐ 1483 MER
- ☐ 1483 Routed
- ☐ 1483 Bridged

Encapsulation Mode:

< Back Next >

Step 3. Click "**Next**" to setup to select the WAN IP type, and the WAN IP setting is provided by your ISP.

The screenshot shows the Planet ADSL 2/2+ Router configuration interface. The top navigation bar includes 'Wizard', 'Status', 'Wizard' (selected), 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. Below the navigation bar, the 'Wizard' section is active. The main content area is titled 'WAN IP Settings' and contains the following elements:

- A sub-header 'WAN IP Settings'.
- A descriptive text: 'Enter information provided to you by your ISP to configure the WAN IP settings.'
- Two radio button options:
 - ☒ Obtain an IP address automatically
 - ☐ Use the following IP address:
- A text input field for 'WAN IP Address' with the value '0.0.0.0'.
- A checked checkbox for 'Enable NAT'.
- Navigation buttons at the bottom right: '< Back' and 'Next >'.

Step 4. Enter the user name and password that your ISP has provided to you. Select the connection type that you want to use. There are three types for your selection – **Continuous**, **Connect on Demand** and **Manual**.

The screenshot shows the Planet ADSL 2/2+ Router configuration interface. The top navigation bar includes 'Wizard', 'Status', 'Wizard' (selected), 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. Below the navigation bar, the 'Wizard' section is active. The main content area is titled 'PPP Username and Password' and contains the following elements:

- A sub-header 'PPP Username and Password'.
- A descriptive text: 'PPP usually requires that you have a user name and password to establish your connection. In the boxes below, enter the user name and password that your ISP has provided to you.'
- Two text input fields:
 - 'PPP Username:' with the value 't0399199'.
 - 'PPP Password:' with masked characters '●●●●●●●●'.
- Three radio button options for 'PPP Connection Type':
 - ☒ Continuous
 - ☐ Connect on Demand
 - ☐ Manual
- Two 'Idle Time' input fields, both with the value '20', corresponding to the 'Connect on Demand' and 'Manual' options.
- Navigation buttons at the bottom right: '< Back' and 'Next >'.

Step 5. Click "**Next**" to setup your LAN IP and DHCP Server setting.

PLANET
Networking & Communication

ADSL 2/2+ Router

Wizard Status **Wizard** LAN WAN Advance Admin Diagnostic

| Wizard |

Wizard

LAN Interface Setup

This page is used to configure the LAN interface of your ADSL Router.

LAN IP:

LAN Subnet Mask:

☐ Enable Secondary IP

DHCP Server

Set and configure the Dynamic Host Protocol mode for your device.

☒ Enable DHCP Server

Start IP:

End IP:

Max Lease Time: Day Hour Min (If all is -1, Max Lease Time is not limited)

Step 6. Enter the **Finish** to save settings and reboot the device or click **Back** to modify your settings.

PLANET
Networking & Communication

ADSL 2/2+ Router

Wizard Status **Wizard** LAN WAN Advance Admin Diagnostic

| Wizard |

Wizard

WAN Setup - Summary

Make sure that the settings below match the settings provided by your ISP.

WAN Setup:

VPI/VCI	0/33
Connect Type	PPPoE/LLC/SNAP, connect forever
NAPT	Enabled
WAN IP	auto assigned
Reserved Gateway	auto assigned
DNS Server	auto assigned

LAN Configuration:

LAN IP	192.168.1.1 / 255.255.255.0
Secondary IP	0.0.0.0 / 0.0.0.0
DHCP Server	enable
DHCP IP Range	192.168.1.2 - 192.168.1.254
DHCP Lease Time	1 day 0 hour 0 min

Click "Finish" to save these settings. **The system will reboot.** Click "Back" to make any modifications.

3.3 LAN

The LAN setup includes two parts – LAN Interface and DHCP Settings.

3.3.1 LAN Interface Settings

There are the IP settings of the LAN Interface for the device. These settings may be referred to as Private settings. You may change the LAN IP address if needed. The LAN IP address is provided to your internal network and cannot be seen on the Internet.

You can change the LAN IP address for your requirements. The default LAN IP is **192.168.1.1**. You can also enable the Secondary LAN IP function in this page. It will allow LAN Interface to have the alias IP for management.

The screenshot displays the 'LAN Interface Setup' configuration page for a PLANET ADSL 2/2+ Router. The page has a blue header with the PLANET logo and the title 'ADSL 2/2+ Router'. Below the header is a navigation bar with tabs: LAN, Status, Wizard, LAN (selected), WAN, Advance, Admin, and Diagnostic. Under the LAN tab, there are sub-tabs: LAN Settings and DHCP Settings. The main content area is titled 'LAN Interface Setup' and contains the following text: 'This page is used to configure the LAN interface of your ADSL Router. Here you may change the settings for the IP address, subnet mask, etc.' Below this is a red note: 'Note: Please Commit/Reboot if you want to make this settings effective immediately.' The configuration fields are: 'Interface Name' (br0), 'IP Address' (192.168.1.1), and 'Subnet Mask' (255.255.255.0). There is a checkbox for 'Secondary IP' which is currently unchecked. At the bottom are two buttons: 'Apply Changes' and 'Undo'.

IP Address: Enter the IP address of your ADSL router in dotted decimal notation, for example, 192.168.1.1 (default setting).

Subnet Mask: Your ADSL router will automatically calculate the subnet mask based on the IP address that you assign. Unless you are implementing sub netting, use the subnet mask computed by the ADSL router.

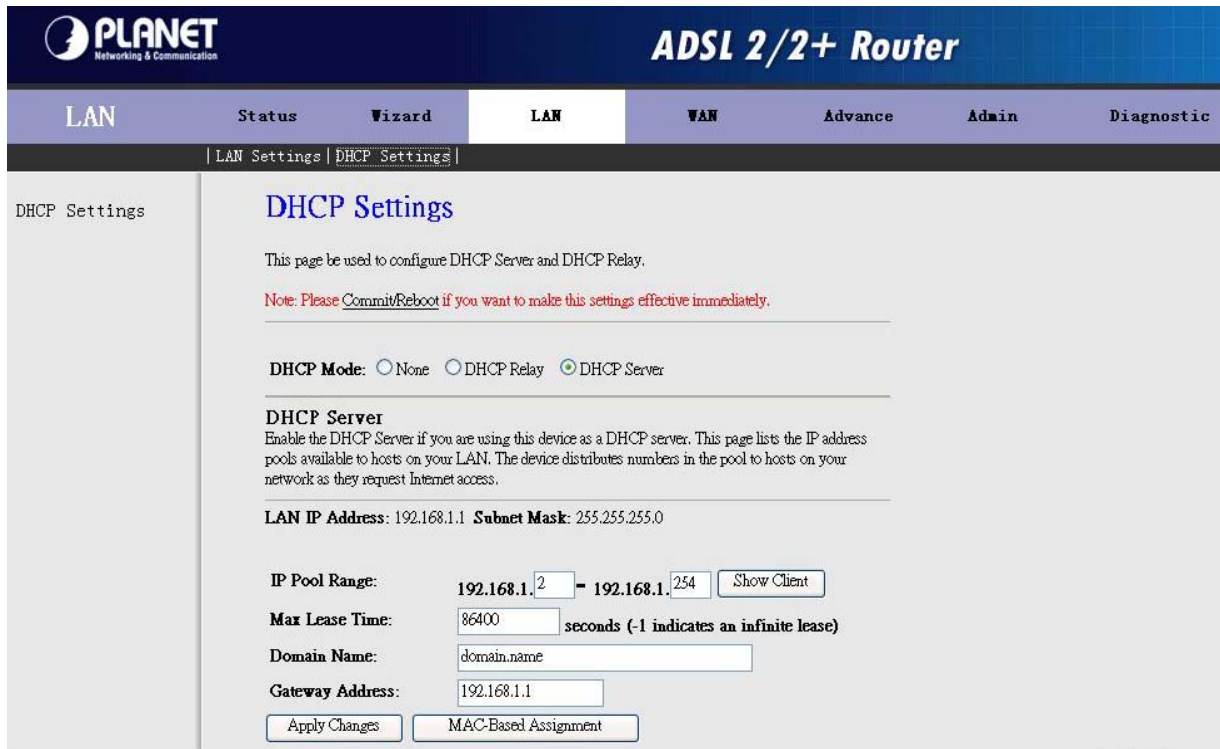
Note

Please Commit/Reboot if you want to make this settings effective immediately

3.3.2 DHCP Server Settings

Enable the DHCP Server if you are using this device as a DHCP server. This page lists the IP address pools available to hosts on your LAN. The device distributes numbers in the pool to hosts on your network as they request Internet access.

You can setup DHCP server to assign IP address to your PC automatically. You can also manually assign an IP according to the MAC address of PC's network card. The ADSL Router supports **DHCP Relay** and **Server** mode, or select **Disable** to disable the DHCP Server.



PLANET Networking & Communication
ADSL 2/2+ Router

LAN Status Wizard LAN WAN Advance Admin Diagnostic

| LAN Settings | DHCP Settings |

DHCP Settings

DHCP Settings

This page be used to configure DHCP Server and DHCP Relay.

Note: Please Commit/Reboot if you want to make this settings effective immediately.

DHCP Mode: ☐ None ☐ DHCP Relay ☒ DHCP Server

DHCP Server
Enable the DHCP Server if you are using this device as a DHCP server. This page lists the IP address pools available to hosts on your LAN. The device distributes numbers in the pool to hosts on your network as they request Internet access.

LAN IP Address: 192.168.1.1 **Subnet Mask:** 255.255.255.0

IP Pool Range: 192.168.1.2 - 192.168.1.254

Max Lease Time: 86400 seconds (-1 indicates an infinite lease)

Domain Name: domain.name

Gateway Address: 192.168.1.1



http://192.168.1.1 - Active DHCP Client Table - Microsoft Internet Explorer

Active DHCP Client Table

This table shows the assigned IP address, MAC address and time expired for each DHCP leased client.

IP Address	MAC Address	Time Expired(s)
192.168.1.2	00:19:db:8e:d9:93	86289

IP Pool Range: Enter the start IP and end IP address you wish to use as the DHCP server's IP assignment.

Show Client: It shows the current client which is connecting with your ADSL router.

Max Lease Time: Enter the amount of time you wish to lease out a given IP address.

Domain Name: Enter your domain name.

Gateway Address: Enter the default gateway IP address. Default is the LAN IP address.

Note

Please **Commit/Reboot** if you want to make this settings effective immediately

MAC-Base Assignment: Click this button will pop-up a new window to assign IP address according to MAC address.

The screenshot shows a web browser window titled "http://192.168.1.1 - Static IP Assignment Table - Microsoft Internet Explorer". The page content includes a title "Static IP Assignment Table" and a descriptive paragraph: "This page is used to configure the static IP base on MAC Address. You can assign/delete the static IP. The Host MAC Address, please input a string with hex number. Such as '00-d0-59-c6-12-43'. The Assigned IP Address, please input a string with digit. Such as '192.168.1.100'." Below this text are two input fields: "Host MAC Address(XX-XX-XX-XX-XX-XX):" and "Assigned IP Address(XXX.XXX.XXX.XXX):". Under the input fields are three buttons: "Assign IP", "Delete Assigned IP", and "Close". At the bottom, there is a section titled "MAC-Based Assignment Table:" which contains a table with three columns: "Select", "Host MAC Address", and "Assigned IP Address".

Enter the MAC address and the IP address that you wish to assign in the fields. Click the **"Assign IP"** button to add it in the MAC-Base Assignment Table.

3.4 WAN

3.4.1 WAN Interface

ADSL 2/2+ Router provide 8 PVCs with different channel mode. You can select the Bridge / MER / PPPoE / PPPoA mode for your environment.

The screenshot shows the WAN Configuration page of the Planet ADSL 2/2+ Router. The page has a navigation bar with tabs: WAN, Status, Wizard, LAN, WAN (selected), Advance, Admin, and Diagnostic. Below the navigation bar, there is a sub-navigation bar with links: WAN Interface, ATM Settings, and ADSL Settings. The main content area is titled "WAN Configuration" and contains the following settings:

- VPI:** 0 **VCI:** [text box]
- Encapsulation:** ☒ LLC ☐ VC-Mux
- Channel Mode:** 1483 Bridged (dropdown)
- Enable NAPT:** ☐
- Admin Status:** ☒ Enable ☐ Disable
- PPP Settings:**
 - User Name:** [text box]
 - Password:** [text box]
 - Type:** Continuous (dropdown)
 - Idle Time (min):** [text box]
 - MAC Address:** 00-00-00-00-00-00 (text box)
- WAN IP Settings:**
 - Type:** ☒ Fixed IP ☐ DHCP
 - Local IP Address:** [text box]
 - Remote IP Address:** [text box]
 - Subnet Mask:** [text box]
 - Unnumbered:** ☐
 - Default Route:** ☐ Disable ☒ Enable

Bridge Mode

The device can be configured to act as a bridging device between your LAN and your ISP. Bridges are devices that enable 2 or more networks to communicate as if they are 2 segments of the same physical LAN.

ADSL 2/2+ Router is Bridge Mode enabled by factory default.

1. Open the WEB page in **“WAN → WAN Interface”**.
2. Select the Channel Mode to **“1483 Bridged”**. Set the parameters **VPI / VCI** and **Encapsulation** mode according to the ISP provided.
3. Click **“Add”** button to add this channel into VC table. You can use the **“Modify”** and **“Delete”** button to manage your PVC.
4. Go to **“Admin → Commit/Reboot”** menu, click **“Commit and Reboot”** button. The device will reboot and apply this setting.

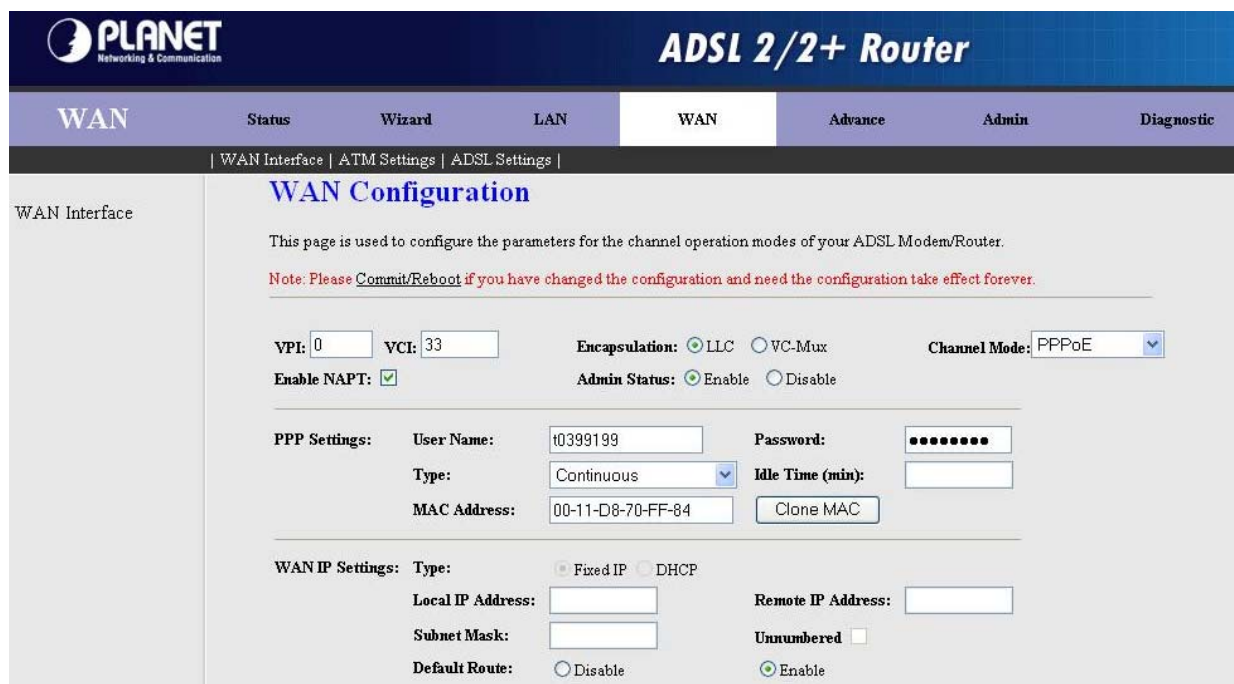
Note

“Commit and Reboot”: Whenever you use the web console to change system settings, the changes are initially placed in temporary storage. To save your changes for future use, you need to use the commit function. This

function saves your changes from RAM to flash memory and then reboot the system.

PPPoE / PPPoA Mode

Select this option if your ISP requires you to use a PPPoE / PPPoA connection. This option is typically used for DSL service. Please enter the proper information in the fields.



PLANET Networking & Communication
ADSL 2/2+ Router

WAN | Status | Wizard | LAN | WAN | Advance | Admin | Diagnostic

| WAN Interface | ATM Settings | ADSL Settings |

WAN Interface

WAN Configuration

This page is used to configure the parameters for the channel operation modes of your ADSL Modem/Router.

Note: Please Commit/Reboot if you have changed the configuration and need the configuration take effect forever.

VPI: VCI: Encapsulation: ☒ LLC ☐ VC-Mux Channel Mode:

Enable NAPT: ☒ Admin Status: ☒ Enable ☐ Disable

PPP Settings:

User Name: Password:

Type: Idle Time (min):

MAC Address:

WAN IP Settings:

Type: ☒ Fixed IP ☐ DHCP

Local IP Address: Remote IP Address:

Subnet Mask: Unnumbered ☐

Default Route: ☐ Disable ☒ Enable

1. Open the WEB page at “WAN → WAN Interface”.
2. Select the Channel Mode to “PPPoE”. Set the value of VPI / VCI and select the Encapsulation mode from your ISP.
3. Enter the User Name / Password from your ISP.
4. Select the PPP connection type: Continuous, Connect on demand and Manual. If you select “Connect on demand” type, specify how many minutes the connection may be idle before it disconnects. If you select “Manual” type, use “Connect” and “Disconnect” buttons to start / stop PPP connection.
5. Click “Add” button to add this channel. You can use the “Modify” and “Delete” button to manage your PVC.
6. Go to “Admin → Commit/Reboot” menu, click “Commit and Reboot” button. The device will reboot and apply this setting.

Your ISP should provide the above information. Note that you must enter the user name exactly as your ISP assigned it. If the assigned name is in the form of `user@domain` where domain identifies a service name, enter it exactly as given.

MER Mode

Select this option to set static IP information. You will need to enter in the encapsulation type, IP address, subnet mask, and gateway address provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which is 4 IP octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format.

The screenshot shows the WAN Configuration page of a Planet ADSL 2/2+ Router. The page has a navigation bar with tabs: WAN, Status, Wizard, LAN, WAN (selected), Advance, Admin, and Diagnostic. Below the navigation bar, there are links for WAN Interface, ATM Settings, and ADSL Settings. The main content area is titled "WAN Configuration" and contains the following fields:

- VPI: 0, VCI: 33
- Encapsulation: ☒ LLC, ☐ VC-Mux
- Channel Mode: 1483 MER (dropdown)
- Enable NAPT: ☒
- Admin Status: ☒ Enable, ☐ Disable
- PPP Settings:
 - User Name: t0399199
 - Password: (masked)
 - Type: Continuous (dropdown)
 - Idle Time (min): (empty field)
 - MAC Address: 00-11-D8-70-FF-84
 - Clone MAC: (button)
- WAN IP Settings:
 - Type: ☒ Fixed IP, ☐ DHCP
 - Local IP Address: (empty field)
 - Remote IP Address: (empty field)
 - Subnet Mask: (empty field)
 - Unnumbered: ☐
 - Default Route: ☐ Disable, ☒ Enable

1. Open the WEB page at “WAN → WAN Interface”.
2. Select the Channel Mode to “1483 MER”. Set the value of **VPI / VCI** and select the **Encapsulation mode** from your ISP.
3. Select the WAN IP type: **DHCP** or **Fixed IP**.
4. Select **Fixed IP** to set static IP information. You will need to enter in the IP address, subnet mask, and gateway address provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which are 4 IP octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format.
5. Select **DHCP** if your ISP provides you an IP address automatically. The router will obtain an IP address automatically.
6. Click “Add” button to add this channel. You can use the “Modify” and “Delete” button to manage your PVC.
7. Go to “Admin → Commit/Reboot” menu, click “Commit and Reboot” button. The device will reboot and apply this setting

3.4.2 ATM Settings

The page is for ATM PVCs' QoS mode setting. The device supports 4 QoS mode — UBR / CBR /rt-VBR / nrt-VBR. You can click the “**ATM Setting**” on the WAN Interface setting screen.

Select	VPI	VCI	QoS	PCR	CDVT	SCR	MBS
<input checked="" type="radio"/>	0	33	UBR	6000	0	---	---

ATM QoS: Select the Quality of Service types for this Virtual Circuit. The ATM QoS types include CBR(Constant Bit Rate), VBR(Variable Bit Rate) and UBR (Unspecified Bit Rate). These QoS types are all controlled by the parameters specified below, including PCR, SCR, and MBS.

CBR is for connections that support constant rates of data transfer. The only parameter you need to worry about in CBR is PCR.

UBR is for connections that have variable traffic. The only parameter you need to worry about in UBR is PCR.

rt-VBR is for connections that, while having variable traffic, require precise timing between traffic source and destination. PCR, SCR and MBS must all be set for rt-VBR.

nrt-VBR is for connections that have variable traffic, do not require precise timing, but still require a set bandwidth availability. PCR, SCR and MBS must all be set for nrt-VBR.

PCR: Peak Cell Rate (PCR) is the maximum rate at which the sender can send cells. This parameter may be lower (but not higher) than the maximum line speed. 1 ATM cell is 53 bytes (424 bits), so a maximum speed of 832 Kbps gives a maximum PCR of 1962 cells/sec. This rate is not guaranteed because it is dependent on the line speed.

SCR: Sustained Cell Rate (SCR) is the mean cell rate of a bursty, on-off traffic source that can be sent at the peak rate, and a parameter for burst-type traffic. SCR may not be greater than the PCR; the system default is 0 cells/sec.

MBS: Maximum Burst Size (MBS) is the maximum number of cells that can be sent at the PCR. After MBS is reached, cell rates fall below SCR until cell rate averages to the SCR again. At this time, more cells (up to the MBS) can be sent at the PCR again.

“Apply Changes”: Set new PVC QoS mode and values for the selected PVC.

“Undo”: Discard your settings.

3.4.3 ADSL Settings

You can set ADSL connect mode here. It supports G.Lite, G.Dmt, T1.413, ADSL2 and ADSL2+. You can also set Annex L, M Option, ADSL Capability and ADSL Tone Mask in this page.

The screenshot shows the configuration interface for a Planet ADSL 2/2+ Router. The top navigation bar includes tabs for WAN, Status, Wizard, LAN, WAN (selected), Advance, Admin, and Diagnostic. Below this, a sub-navigation bar shows links for WAN Interface, ATM Settings, and ADSL Settings (selected). The main content area is titled 'ADSL Settings' and contains the following configuration options:

- ADSL modulation:**
 - ☐ G.Lite
 - ☒ G.Dmt
 - ☒ T1.413
 - ☒ ADSL2
 - ☒ ADSL2+
- AnnexL Option:**
 - ☐ Enabled
- AnnexM Option:**
 - ☐ Enabled
- ADSL Capability:**
 - ☒ Bitswap Enable
 - ☒ SRA Enable
- ADSL Tone:**

3.5 Advance

You can configure different advanced services in this part. It includes **DNS, Firewall, Virtual Server, Routing, IP QoS, Anti-DoS, Port Mapping** and **Other**.

3.5.1 DNS

In this screen, you can modify the DNS server settings. It includes the DNS and DDNS functions.

DNS Configuration

The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes 'Advance', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. Below this is a sub-menu with 'DNS', 'Firewall', 'Virtual Server', 'Routing', 'IP QoS', 'Anti-dos', 'Port Mapping', and 'Other'. The main content area is titled 'DNS Configuration' and contains the following text: 'This page is used to configure the DNS server IP addresses for DNS Relay.' and a note: 'Note: Please Commit/Reboot if you want to make this settings effective immediately.' There are two radio buttons: 'Attain DNS Automatically' (selected) and 'Set DNS Manually'. Below the 'Set DNS Manually' option are three input fields labeled 'DNS 1:', 'DNS 2:', and 'DNS 3:'. At the bottom are two buttons: 'Apply Changes' and 'Reset Selected'.

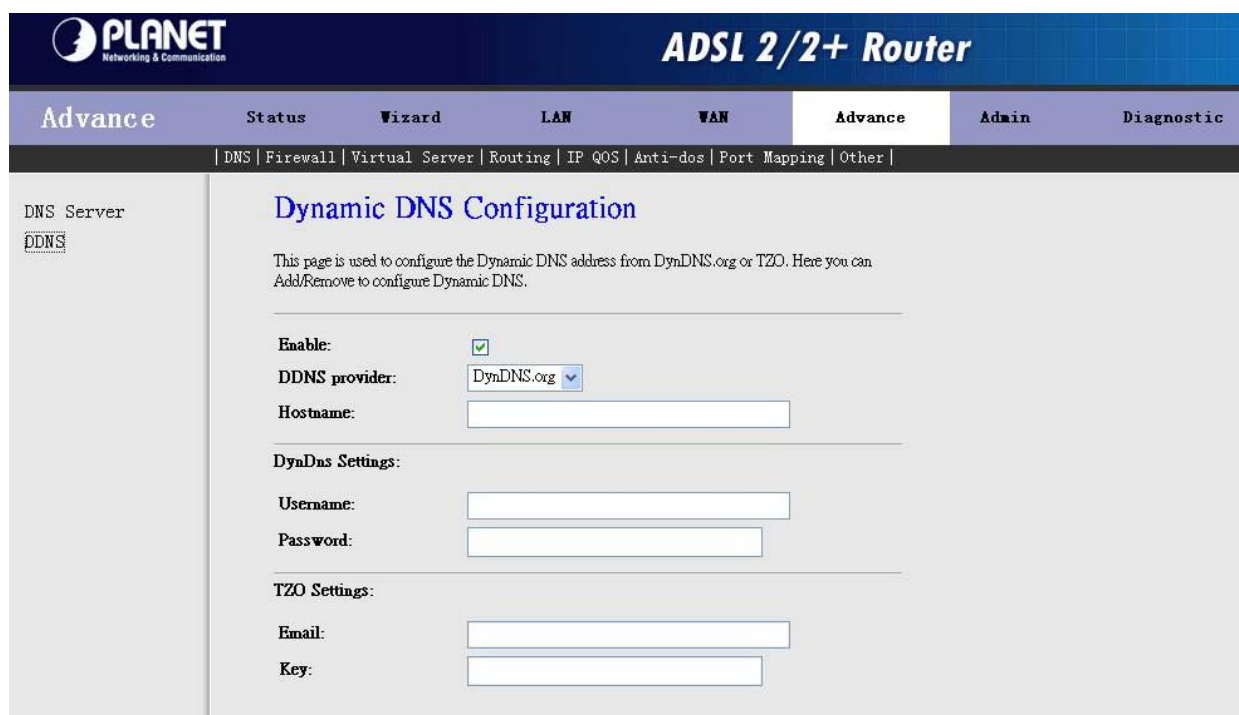
Attain DNS Automatically: If “Attain DNS Automatically” checkbox is selected, this router will accept the first received DNS assignment from one of the PPPoA, PPPoE or MER/DHCP enabled PVC(s) during the connection establishment.

Set DNS Manually: Select this method; you need to enter the DNS Server IP address manually. You can enter three entries in these fields.

DDNS

In this screen, you can modify the Dynamic DNS settings.

The Dynamic DNS service allows you to alias a dynamic IP address to a static hostname in any of the many domains, allowing your DSL router to be more easily accessed from various locations on the Internet.



Planet Networking & Communication

ADSL 2/2+ Router

Advance | Status | Wizard | LAN | WAN | **Advance** | Admin | Diagnostic

DNS | Firewall | Virtual Server | Routing | IP QoS | Anti-dos | Port Mapping | Other |

Dynamic DNS Configuration

This page is used to configure the Dynamic DNS address from DynDNS.org or TZO. Here you can Add/Remove to configure Dynamic DNS.

Enable: ☒

DDNS provider: DynDNS.org

Hostname:

DynDns Settings:

Username:

Password:

TZO Settings:

Email:

Key:

Enable: Enable or disable DDNS.

DDNS Provider: Choose the option of provider. It supports the DynDns and TZO.

Hostname: Type the domain name assigned to your ADSL by your Dynamic DNS provider.

DynDns Settings:

Username: Type your user name.

Password: Type the password assigned to you.

TZO Settings:

E-mail Address: Type your e-mail address.

Key: Type your key number.

Click the **“Add”** to add this DDNS entry or click **“Remove”** to delete the DDNS entry.

Note

Please Commit/Reboot if you want to make this settings effective immediately

3.5.2 Firewall

Firewall is an advance feature used to deny or allow traffic from passing through the device. ADSL router support some firewall related functions. It includes the IP/Port Filter, MAC Filter and URL Blocking.

3.5.2.1 IP/Port filtering

Use the IP/Port filters to deny / allow particular LAN IP addresses from accessing the Internet. You can deny / allow specific port numbers or all ports for a specific IP address.

The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes tabs for Advance, Status, Wizard, LAN, WAN, Advance (selected), Admin, and Diagnostic. Below this is a sub-menu with links for DNS, Firewall (selected), Virtual Server, Routing, IP QoS, Anti-dos, Port Mapping, and Other. The main content area is titled "IP/Port Filtering" and contains the following elements:

- A sidebar on the left with links for IP/Port Filter, MAC Filter, and URL Blocking.
- A description: "Entries in this table are used to restrict certain types of data packets through the Gateway. Use of such filters can be helpful in securing or restricting your local network."
- A note: "Note: Please Commit/Reboot if you want to make this settings effective immediately."
- Outgoing Default Action: ☐ Deny ☒ Allow
- Incoming Default Action: ☒ Deny ☐ Allow
- Direction: Protocol: Rule Action: ☒ Deny ☐ Allow
- Source IP Address: Subnet Mask: Port:
- Destination IP Address: Subnet Mask: Port:
- Current Filter Table:

Select	Direction	Protocol	Src Address	Src Port	Dst Address	Dst Port	Rule Action
--------	-----------	----------	-------------	----------	-------------	----------	-------------

At the bottom of the table are two buttons: "Delete Selected" and "Delete All".

Default Setting: Specify default filtering rule action to be either **Deny** or **Allow** if no other rules can be applied. You can specify the direction on **Outgoing** and **Incoming**. Click the **"Apply Changes"** to apply your setting. By default, all outgoing IP traffic from LAN is allowed, and all IP traffic from WAN is deny.

Click the **"Add Rule"** button to show filtering rule field, enter the rule information that you want to use.

Outgoing Default Action ☐ Deny ☒ Allow
 Incoming Default Action ☒ Deny ☐ Allow Apply Changes

Direction: Outgoing Protocol: TCP Rule Action ☒ Deny ☐ Allow

Source IP Address: 192.168.1.2 Subnet Mask: 5.255.255.255 Port: 80 - 80
 Destination IP Address: 168.95.1.1 Subnet Mask: 5.255.255.255 Port: 80 - 80 Add

Current Filter Table:

Select	Direction	Protocol	Src Address	Src Port	Dst Address	Dst Port	Rule Action
<div> Delete Selected Delete All </div>							

Rule Action: Select the Deny or Allow for your rules.

Direction: Select the Outgoing or Incoming.

Protocol: Set protocol type to be blocked or allowed.

Src IP Address / Mask / Port: Set the subnet of source side computers to be denied / allowed access to the destination side computers. An individual source IP address can be designated for filtering.

If all IP addresses must be filtered, leave this box blank. Enter the IP/subnet mask address in the form of XXX.XXX.XXX.XXX. Example: The IP address is 192.168.1.2 and the net mask 255.255.255.255. The IP address 0.0.0.0 and the net mask 255.255.255.255 is not care.

Dst IP Address / Mask / Port: Set the subnet of destination side computers to be denied/allowed access to the source side computers. The destination IP address to be filtered is set. If all IP addresses must be filtered, leave this box blank. Enter the IP/subnet mask address in the form of XXX.XXX.XXX.XXX. Example: The IP address is 168.95.1.1 and the net mask 255.255.255.255. The IP address 0.0.0.0 and the net mask 255.255.255.255 is not care.

Click “**Add**” button to add this filtering rule.

Note

Please Commit/Reboot if you want to make this settings effective immediately

3.5.2.2 MAC Filtering

Use the MAC filters to deny computers within the local area network from accessing the Internet. Entries in Filter Table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes 'Advance', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance' (selected), 'Admin', and 'Diagnostic'. Below this is a sub-menu: 'DNS | Firewall | Virtual Server | Routing | IP QoS | Anti-dos | Port Mapping | Other |'. The left sidebar has 'IP/Port Filter', 'MAC Filter' (selected), and 'URL Blocking'. The main content area is titled 'MAC Filtering' and contains the following elements:

- A note: "Entries in this table are used to restrict the transmission of certain types of data packets from your local network to the Internet through the Gateway." and "Note: Please Commit/Reboot if you want to make this settings effective immediately."
- Outgoing Default Action: ☐ Deny ☒ Allow
- Incoming Default Action: ☐ Deny ☒ Allow
- Direction: Rule Action: ☒ Deny ☐ Allow
- Source MAC Address:
- Destination MAC Address:
- Current Filter Table:

Select	Direction	Src MAC Address	Dst MAC Address	Rule Action
<input type="checkbox"/>	Outgoing	00-11-d8-70-ff-84	-----	Deny

Buttons: Delete Selected, Delete All

Default Action: Specify default filtering rule action to be either *Deny* or *Allow* if no other rules can be applied. Click the “**Apply Changes**” to apply your setting. By default, all Outgoing and Incoming action is allowed.

Click the “**Add Rule**” button to show filtering rule field, enter the rule information that you want to use.

This is a detailed view of the MAC Filtering configuration form. It includes the same default action settings as the screenshot above. The 'Direction' is set to 'Outgoing' and the 'Rule Action' is 'Deny'. The 'Source MAC Address' is filled with '0011d870ff84'. The 'Destination MAC Address' is empty. The 'Add' button is visible. Below the form is the 'Current Filter Table' with one entry:

Select	Direction	Src MAC Address	Dst MAC Address	Rule Action
<input type="checkbox"/>	Outgoing	00-11-d8-70-ff-84	-----	Deny

Rule Action: Specify this filtering rule action to be either *Deny* or *Allow*.

Direction: Set direction type to be blocked or allowed.

Src MAC Address: Set the MAC address of source side computers to be denied/allowed access to the destination side computers.

Dst MAC Address: Set the MAC address of destination side computers to be denied/allowed access to the source side computers.

Click “**Add**” button to add this filtering rule.

 **Note**

Please Commit/Reboot if you want to make this settings effective immediately

3.5.2.3 URL Block

This page is used to configure the Blocked FQDN (Such as tw.yahoo.com) and filtered keyword. Here you can add / delete FQDN and filtered keyword.

The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes 'Advance', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance' (highlighted), 'Admin', and 'Diagnostic'. Below this is a sub-menu with 'DNS', 'Firewall', 'Virtual Server', 'Routing', 'IP QOS', 'Anti-dos', 'Port Mapping', and 'Other'. The main content area is titled 'URL Blocking Configuration'. It contains a sidebar with 'IP/Port Filter', 'MAC Filter', and 'URL Blocking'. The main area has a description: 'This page is used to block a fully qualified domain name(Such as tw.yahoo.com) and filtered keywords. Here you can add/delete FQDN and filtered keyword.' Below this is a note: 'Note: Please Commit/Reboot if you want to make this settings effective immediately.' The 'URL Blocking' section has radio buttons for 'Disable' and 'Enable' (selected), and an 'Apply Changes' button. Below this is an 'FQDN' field with 'www.yahoo.com' and an 'Add' button. The 'URL Blocking Table' has a 'Select' dropdown, a 'FQDN' column, and 'Delete Selected' and 'Delete All' buttons. The 'Keyword Filtering' section has a 'Keyword' field with 'msn' and an 'Add' button. The 'Keyword Filtering Table' has a 'Select' dropdown, a 'Filtered Keyword' column, and 'Delete Selected' and 'Delete All' buttons.

URL Blocking: Enable or Disable URL Blocking. Click the “**Apply Changes**” to apply your setting.

URL Blocking: Enter the FQDN in the field and click the “**Add FQDN**” button to add this rule.

Keyword Filtering: Enter the keyword which you want to block. Click “**Add keyword**” button to add this filtering rule.

Note

Please Commit/Reboot if you want to make this settings effective immediately

3.5.3 Virtual Server

The Virtual Server is the server or server(s) behind NAT (on the LAN), for example, Web server or FTP server, that you can make visible to the outside world even though NAT makes your whole inside network appear as a single machine to the outside world.

The Virtual Server includes two parts – **Services** and **DMZ**.

3.5.3.1 Services

Click “**Add**” to show the Virtual Server setting screen.

The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes tabs for Advance, Status, Wizard, LAN, WAN, and Admin. The 'Advance' tab is selected, and the 'Virtual Server' sub-tab is active. The main content area is titled 'Port Forwarding' and contains a table for configuring port forwarding rules. The table has columns for Select, Local IP Address, Protocol, Local Port, Comment, Enable, Remote Host, Public Port, and Interface. Below the table are buttons for 'Delete Selected' and 'Delete All'. The 'Add' button is located at the bottom right of the form.

Services
DMZ Settings

Port Forwarding

Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.

Note: Please Commit/Reboot if you want to make this settings effective immediately.

Port Forwarding: ☒ Disable ☐ Enable

Protocol: Comment: ☒ Enable

Local IP Address: Local Port: -

Remote IP Address: Public Port: -

Interface:

Current Port Forwarding Table:

Select	Local IP Address	Protocol	Local Port	Comment	Enable	Remote Host	Public Port	Interface
--------	------------------	----------	------------	---------	--------	-------------	-------------	-----------

Protocol: Choose proper protocols for your services.

Comment: You can type some description for the service.

Local IP Address: When you intend to assign a specified address and must be running the appropriate Server software, enter the server IP address here.

Remote IP Address: When you intend the specified remote client access the virtual server, enter the remote IP address here.

Local Port start / end: Enter the range of port numbers which the Server software is configured to use. If only one port number is required, enter it in both the start and finish fields.

Remote Port start / end: The port numbers used by Internet users when connecting to the Server. These are normally the same as the Internal Port Numbers.

Click “**OK**” button to add this Virtual Server entry.

Note Please Commit/Reboot if you want to make this settings effective immediately

3.5.3.2 DMZ

A **DMZ (Demilitarized Zone)** allows a single computer on your LAN to expose ALL of its ports to the Internet. Enter the IP address of that computer as a DMZ (Demilitarized Zone) host with unrestricted Internet access. When doing this, the DMZ host is no longer behind the firewall.



The screenshot shows the Planet ADSL 2/2+ Router web interface. The top navigation bar includes 'Advance', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. Below this is a sub-menu with 'DNS', 'Firewall', 'Virtual Server', 'Routing', 'IP QoS', 'Anti-dos', 'Port Mapping', and 'Other'. The 'DMZ' settings page is displayed, featuring a description of a Demilitarized Zone, a note to 'Commit/Reboot', and radio buttons for 'DMZ Host' (Disable/Enable). A text field for 'DMZ Host IP Address' and an 'Apply Changes' button are also visible.

Enable DMZ: Click it to enable the DMZ function.

Enter “**DMZ Host IP Address**” and click “**Apply Changes**” to activate the DMZ host.

Note Please **Commit/Reboot** if you want to make this settings effective immediately

3.5.4 Routing

You have two ways to manage the device’s routing information. It includes RIP and Static Route.

3.5.4.1 RIP

Enable the RIP if you are using this device as a RIP-enabled router to communicate with others using the Routing Information Protocol. This page is used to select the interfaces on your devices that use RIP, and the version of the protocol used.

PLANET Networking & Communication
ADSL 2/2+ Router

Advance | Status | Wizard | LAN | WAN | **Advance** | Admin | Diagnostic

DNS | Firewall | Virtual Server | Routing | IP QOS | Anti-dos | Port Mapping | Other |

RIP
Static Route

RIP Configuration

Enable the RIP if you are using this device as a RIP-enabled router to communicate with others using the Routing Information Protocol. This page is used to select the interfaces on your devices that use RIP and the version of the protocol used.

RIP: ☒ Disable ☐ Enable

Interface:
 Receive Mode:
 Send Mode:

RIP Configuration Table:

Select	Interface	Receive Mode	Send Mode
<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/>			

To activate RIP for the device, select the **“Enabled”** radio button for RIP Mode and click **“Apply Changes”** to apply it.

To configure an individual interface, select the **Interface**, **Receive Mode** and **Send mode**. Click the **“Add”** button to save the configuration, and to start or stop RIP based on the Global RIP mode selected.

3.5.4.2 Static Route

This page is used to configure the routing information. Here you can add / delete IP routes.

PLANET Networking & Communication
ADSL 2/2+ Router

Advance | Status | Wizard | LAN | WAN | **Advance** | Admin | Diagnostic

DNS | Firewall | Virtual Server | Routing | IP QOS | Anti-dos | Port Mapping | Other |

RIP
Static Route

Routing Configuration

This page is used to configure the routing information. Here you can add/delete IP routes.

Enable: ☒
 Destination:
 Subnet Mask:
 Next Hop:
 Metric:
 Interface:

Static Route Table:

Select	State	Destination	Subnet Mask	NextHop	Metric	IF
--------	-------	-------------	-------------	---------	--------	----

Click **“Enable”** to enable the Static Routing function, you can query the preset static routes, delete an existing static route, or add a new static route. By default, the system has no

static route information.

Destination: The IP address where packets will go to.

Subnet Mask: The subnet mask of the destination IP address.

Next Hop: The gateway that the packets will pass by during transmission.

Metric: Metric represents the “cost” of transmission for routing purposes. IP Routing uses hop count as the measurement of cost, with a minimum of 1 for directly connected networks. Enter a number that approximates the cost for this link. The number need not to be precise, but it must between 1 and 15. In practice, 2 or 3 is usually a good number.

Interface: The interface that the packets pass through on the device.

Click “**Add Route**” to add this routing information.

3.5.5 IP QoS

Entries in this table are used to assign the precedence for each incoming packet based on physical LAN port, TCP / UDP port number, and source / destination IP address / subnet masks.

PLANET Networking & Communication

ADSL 2/2+ Router

Advance | Status | Wizard | LAN | WAN | **Advance** | Admin | Diagnostic

DNS | Firewall | Virtual Server | Routing | **IP QoS** | Anti-dos | Port Mapping | Other |

IP QoS

Entries in this table are used to assign the precedence for each incoming packet based on physical LAN port, TCP/UDP port number, and source/destination IP address/subnet masks.

Note: Please Commit/Reboot if you want to make this settings effective immediately.

IP QoS: ☒ Disabled ☐ Enabled Default QoS: IP Precedence [Apply Changes](#)

Specify Traffic Classification Rules

Source IP: Subnet Mask: Port:
Destination IP: Subnet Mask: Port:
Protocol: Physical Port:

Assign Priority and/or IP Precedence and/or Type of Service and/or DSCP

Outbound Priority: p3(lowest) 802.1p:
Precedence: TOS:
[Add](#)

IP QoS Rules:

		Traffic Classification Rules						Mark			
Select	Status	Src IP	Src Port	Dst IP	Dst Port	Protocol	LAN Port	Priority	IP Precedence	IP ToS	WAN 802.1p
Delete Selected Delete All											

IP QoS: Enable or Disable IP QoS function. Click the “**Apply Changes**” to apply your setting.

When you click “**Add Rule**” button, the IP QoS Setting screen will appear. You can specify the network Outbound Priority on this setting.

IP QoS: ☐ Disabled ☒ Enabled

Default QoS: IP Pred

Specify Traffic Classification Rules

Source IP: Subnet Mask: Port:
Destination IP: Subnet Mask: Port:
Protocol: Physical Port:

Assign Priority and/or IP Precedence and/or Type of Service and/or DSCP

Outbound Priority: 802.1p:

Precedence: TOS:

IP QoS Rules:

		Traffic Classification Rules						Mark			
Select	Status	Src IP	Src Port	Dst IP	Dst Port	Protocol	LAN Port	Priority	IP Preced	IP ToS	WAN 802.1p
<input type="checkbox"/>	Enable		80		80	TCP	LAN0	p3			
<input type="checkbox"/>	Enable		21		21	TCP		p0			

3.5.6 Anti-DoS

"**Denial-of-Service Attack**" (DoS Attack), a type of attack on a network that is designed to bring the network to its knees by flooding it with useless traffic. This page is used to prevent DOS attacks that you configure.

PLANET
Networking & Communication

ADSL 2/2+ Router

Advance Status Wizard LAN WAN Advance Admin Diagnostic

DNS | Firewall | Virtual Server | Routing | IP QoS | Anti-dos | Port Mapping | Other |

Anti-dos

Anti-dos Settings

"denial-of-service attack"(DoS Attack),a type of attack on a network that is designed to bring the network to its knees by flooding it with useless traffic.This page is used to prevent DOS attacks that you configure.

Note: Please Commit/Reboot if you want to make this settings effective immediately.

☐ Enable Anti-dos

- ☐ Whole System Flood: SYN 100 packets/sec
- ☐ Whole System Flood: FIN 100 packets/sec
- ☐ Per-Source IP Flood: UDP 100 packets/sec
- ☐ Per-Source IP Flood: ICMP 100 packets/sec
- ☐ TCP/UDP PortScan High Sensitivity
- ☐ ICMP Smurf
- ☐ IP Land
- ☐ IP Spoof
- ☐ IP TearDrop
- ☐ PingOfDeath
- ☐ TCP Scan
- ☐ TCP SynWithData
- ☐ UDP Bomb
- ☐ UDP EchoChargen

Select All Clear All

☐ Enable Source IP Blocking 300 Block Time(Sec)

Apply Changes

Select "**Enable**" can automatically detect and block Denial of Service (DoS) attacks, such as Ping of Death, SYN Flood, Port Scan and Land Attack. Select the attack types that you want to block and click "**Apply Changes**" to apply your settings.

Note

Please Commit/Reboot if you want to make this settings effective immediately

3.5.7 Port Mapping

Port Mapping supports multiple ports to PVC and bridging groups. Each group will perform as an independent network. To support this feature, you must create mapping groups with appropriate LAN and WAN interfaces using the “->” button. The “<-” button will remove the grouping and add the ungrouped interfaces to the Default group.

Planet Networking & Communication

ADSL 2/2+ Router

Advance Status Wizard LAN WAN Advance Admin Diagnostic

DNS | Firewall | Virtual Server | Routing | IP QoS | Anti-dos | Port Mapping | Other |

Port Mapping

Port Mapping Configuration

To manipulate a mapping group:

1. Select a group from the table.
2. Select interfaces from the available/grouped interface list and add it to the grouped/available interface list using the arrow buttons to manipulate the required mapping of the ports.
3. Click "Apply Changes" button to save the changes.

Note:

1. A interface only belongs to one group.
2. Please Commit/Reboot if you want to make this settings effective immediately.

☒ Disabled ☐ Enabled

Grouped Interfaces Available Interfaces

Select Interfaces

Default	eth0,usb0,ppp0

Apply Changes

To manipulate a mapping group:

1. Select a group from the table.
2. Select interfaces from the WAN and LAN interface list and add them to the grouped interface list using the arrow buttons to manipulate the required mapping of the ports.
3. Click "**Apply Changes**" button to save the changes.

Note

1. An interface only belongs to one group.
2. Please Commit/Reboot if you want to make this settings effective immediately.

3.5.8 Other

This function includes as following parts – IGMP Proxy, UPnP and Bridge.

3.5.8.1 IGMP Proxy

IGMP Proxy enables the system to issue IGMP host messages on behalf of hosts that the system discovered through standard IGMP interfaces.

The screenshot shows the configuration interface for an ADSL 2/2+ Router. The top navigation bar includes tabs for Advance, Status, Wizard, LAN, WAN, and Admin. The 'Advance' tab is selected, and the 'IGMP Proxy' option is chosen from the left sidebar. The main content area is titled 'IGMP Proxy Configuration'. It contains a description of the IGMP proxy function, a note to commit/reboot, and two radio buttons for 'IGMP Proxy' (Disable and Enable). Below this is a 'Proxy Interface' dropdown menu set to 'ppp0' and an 'Apply Changes' button.

The system acts as a proxy for its hosts when you enable it by doing the follows:

- Enable IGMP proxy on WAN interface (upstream), which connects to a router running IGMP.
- Enable IGMP on LAN interface (downstream), which connects to its hosts.

Note

Please Commit/Reboot if you want to make this settings effective immediately.

3.5.8.2 UPnP

UPnP (Universal Plug and Play) is a distributed, open networking standard that uses TCP/IP for simple peer-to-peer network connectivity between devices. An UPnP device can dynamically join a network, obtain an IP address, convey its capabilities and learn about other devices on the network. In turn, a device can leave a network smoothly and automatically when it is no longer in use. UPnP broadcasts are only allowed on the LAN.

How do I know if I'm using UPnP?

UPnP hardware is identified as an icon in the Network Connections folder (in Windows XP & Windows ME). Each UPnP-compatible device that is installed on your network will appear as a separate icon.

The screenshot shows the Planet ADSL 2/2+ Router configuration interface. The top navigation bar includes 'Advance', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance' (selected), 'Admin', and 'Diagnostic'. Below this is a sub-menu: 'DNS | Firewall | Virtual Server | Routing | IP QOS | Anti-dos | Port Mapping | Other |'. The left sidebar lists 'IGMP Proxy', 'UPnP' (selected), 'Bridge', and 'IP PassThrough'. The main content area is titled 'UPnP Configuration'. It contains a description: 'This page is used to configure UPnP. The system acts as a daemon when you enable it and select WAN interface (upstream) that will use UPnP.' Below this is a note: 'Note: Please Commit/Reboot if you want to make this settings effective immediately.' The configuration options are 'UPnP:' with radio buttons for 'Disable' (selected) and 'Enable', and 'WAN Interface:' with a dropdown menu showing 'ppp0'. An 'Apply Changes' button is at the bottom right.

Click “**Enable**” to enable UPnP function and select the WAN Interface. Click “**Apply Changes**” to apply your setting.

Note Please Commit/Reboot if you want to make this settings effective immediately

3.5.8.3 Bridge

This page is used to configure the bridge parameters. Here you can change the settings or view some information on the bridge and its attached ports.

The screenshot shows the Planet ADSL 2/2+ Router configuration interface for the Bridge Configuration page. The top navigation bar is the same as the previous screenshot. The left sidebar lists 'IGMP Proxy', 'UPnP', 'Bridge' (selected), and 'IP PassThrough'. The main content area is titled 'Bridge Configuration'. It contains a description: 'This page is used to configure the bridge parameters. Here you can change the settings or view some information on the bridge and its attached ports.' Below this is a note: 'Note: Please Commit/Reboot if you want to make this settings effective immediately.' The configuration options are 'Ageing Time:' with a text input field containing '300' and '(seconds)', and '802.1d Spanning Tree:' with radio buttons for 'Disabled' (selected) and 'Enabled'. At the bottom are three buttons: 'Apply Changes', 'Undo', and 'Show MACs'.

Ageing Time: Enter the time for the bridge.

802.1d Spanning Tree: You can Enable or Disable the 802.1d Spanning Tree Protocol.

Click “**Apply Changes**” to apply your setting.

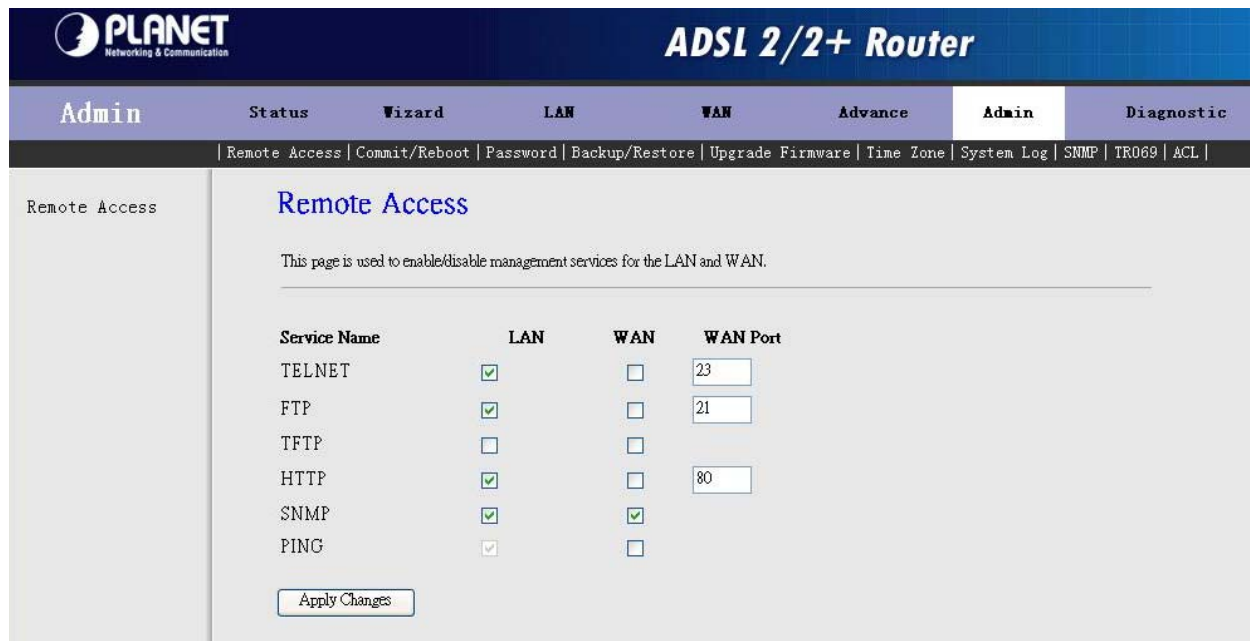
Note Please Commit/Reboot if you want to make this settings effective immediately.

3.6 Admin

You can configure admin management in this part. It includes **Remote Access**, **Commit / Reboot**, **Password**, **Backup / Restore**, **Update Firmware**, **Time Zone**, **System Log**, **SNMP**, **TR-069**, and **ACL**.

3.6.1 Remote Access

User can enable or disable remote management services for the LAN and WAN.



The screenshot shows the PLANET ADSL 2/2+ Router Admin interface. The top navigation bar includes links for Admin, Status, Wizard, LAN, WAN, Advance, Admin (selected), and Diagnostic. Below this is a sub-menu bar with links for Remote Access, Commit/Reboot, Password, Backup/Restore, Upgrade Firmware, Time Zone, System Log, SNMP, TR069, and ACL. The main content area is titled "Remote Access" and contains a description: "This page is used to enable/disable management services for the LAN and WAN." Below the description is a table with columns for Service Name, LAN, WAN, and WAN Port.

Service Name	LAN	WAN	WAN Port
TELNET	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23
FTP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21
TFTP	<input type="checkbox"/>	<input type="checkbox"/>	
HTTP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	80
SNMP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
PING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

At the bottom of the table is an "Apply Changes" button.

Select the service items which you want to remote management. Click "**Apply Changes**" to apply your setting.

3.6.2 Commit / Reboot

The **Commit / Reboot** screen allows you to restart your router with its current settings or the factory default settings.

- If you want reset the current settings to factory default, please choose "**Reset to Factory Default Settings**", and then press "**System Reboot**" button to reboot system.
- If you want commit current settings, please choose "**Save Current Settings**", and then press "**System Reboot**" button to reboot system.

PLANET Networking & Communication **ADSL 2/2+ Router**

Admin Status Wizard LAN WAN Advance **Admin** Diagnostic

Remote Access | Commit/Reboot | Password | Backup/Restore | Upgrade Firmware | Time Zone | System Log | SNMP | TR069 | ACL |

Commit/Reboot

Commit/Reboot

Please press the "System Reboot" button to reboot system.

If want to become the factory default setting, please select "Restore to Factory Default Setting", then press the "System Reboot" button.

If want to save current setting, please select "Save Current Setting", then press the "System Reboot" button.

☐ Restore to Factory Default Setting

☒ Save Current Setting

System Reboot

3.6.3 Password

This page is used to set the account to access the web server of ADSL Router. The new password will be availability after system reboot.

PLANET Networking & Communication **ADSL 2/2+ Router**

Admin Status Wizard LAN WAN Advance **Admin** Diagnostic

Remote Access | Commit/Reboot | Password | Backup/Restore | Upgrade Firmware | Time Zone | System Log | SNMP | TR069 | ACL |

Password

Password Setup

This page is used to set the account to access the web server of ADSL Router. Empty user name and password will disable the protection.

User Name: admin

Old Password:

New Password:

Confirmed Password:

Apply Changes Reset

User Name: There are two level user accounts for your selection. The admin account has full rights for device management, and the user account only can see the status information of this device.

Old Password: Enter the old password.

New Password: Enter your new password.

Confirmed Password: Enter your new password again.

Click **"Apply Changes"** to apply your setting.

3.6.4 Backup / Restore

This page allows you to backup current settings to a file or restores the settings from the file which was saved previously.

The screenshot shows the PLANET ADSL 2/2+ Router Admin interface. The top navigation bar includes 'Admin', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin' (highlighted), and 'Diagnostic'. Below this is a secondary navigation bar with links: 'Remote Access', 'Commit/Reboot', 'Password', 'Backup/Restore', 'Upgrade Firmware', 'Time Zone', 'System Log', 'SNMP', 'TR069', and 'ACL'. The main content area is titled 'Backup/Restore Settings'. It contains a text block: 'This page allows you to backup current settings to a file or restore the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.' Below this, there are two sections: 'Save Settings to File:' with a 'Save...' button, and 'Load Settings from File:' with a text input field, a 'Browse...' button, and an 'Upload' button.

Backup: Click the “**Save...**” button to backup the configuration of router.

Restore: Click the “**Browse...**” button, select the correct update configure settings file. Then click the “**Upload**” to update the configurations.

3.6.5 Upgrade Firmware

You can upgrade the **firmware** of the router in this page. Make sure the firmware you want to use is on the local hard drive of the computer.

The screenshot shows the PLANET ADSL 2/2+ Router Admin interface. The top navigation bar includes 'Admin', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin' (highlighted), and 'Diagnostic'. Below this is a secondary navigation bar with links: 'Remote Access', 'Commit/Reboot', 'Password', 'Backup/Restore', 'Upgrade Firmware', 'Time Zone', 'System Log', 'SNMP', 'TR069', and 'ACL'. The main content area is titled 'Upgrade Firmware'. It contains a text block: 'This page allows you upgrade the ADSL Router firmware to new version. Please note, do not power off the device during the upload because it may crash the system.' Below this, there is a 'Select File:' section with a text input field and a 'Browse...' button. At the bottom, there are 'Upload' and 'Reset' buttons.

Click on “**Browse...**” button to browse the local had drive and locate the firmware to be used for the update. Then press “**Upload**” to upload new Firmware.

Note

**It might take several minutes, don't power off it during upgrading.
Device will restart after the upgrade!!**

3.6.6 Time Zone

The system time is the time used by the device for scheduling services. You can manually set the time or connect to a NTP (Network Time Protocol) server. If an NTP server is set, you will only need to set the time zone.

The screenshot shows the PLANET ADSL 2/2+ Router Admin interface. The top navigation bar includes 'Admin', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin' (highlighted), and 'Diagnostic'. Below this is a secondary navigation bar with links: 'Remote Access', 'Commit/Reboot', 'Password', 'Backup/Restore', 'Upgrade Firmware', 'Time Zone' (highlighted), 'System Log', 'SNMP', 'TR069', and 'ACL'. The main content area is titled 'Time Zone Setting' and contains the following elements:

- A note: 'You can maintain the system time by synchronizing with a public time server over the Internet..'
- A red note: 'Note: 1. Manual settings will be invalidation as soon as the modem power off. 2. Please Commit/Reboot if you want to make this settings effective immediately.'
- 'Current Time' section with input fields for Yr (2000), Mon (1), Day (1), Hr (0), Mn (33), and Sec (5).
- 'Time Zone Select' dropdown menu showing '(GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi'.
- 'Enable SNTP client update' checkbox, which is checked.
- 'SNTP server' section with two options: a radio button selected for '203.117.180.36 - Asia Pacific' and another radio button for '220.130.158.52 (Manual IP Setting)'.
- 'Apply Changes' and 'Refresh' buttons at the bottom.

Current Time: It shows the current time.

Time Zone: Choose the Time Zone of your location. This will set the time difference between your time zone and Greenwich Mean Time (GMT).

SNTP Server: Select the NTP Server from the slide down menu or enter the NTP IP address manually.

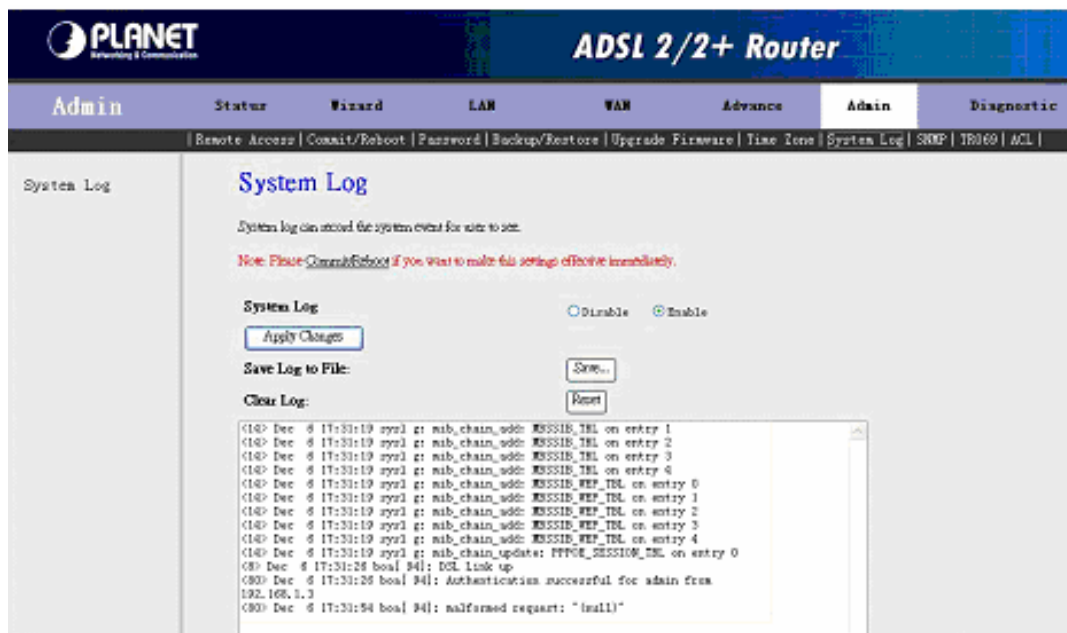
Click “**Apply Changes**” to apply your setting.

Note

Please Commit/Reboot if you want to make this settings effective immediately

3.6.7 System Log

Click “**System Log**” to show the log information of device. The system log dialog allows you to view the system log and click the “**Refresh**” button to fresh the system event logs.



System Log: You can Enable or Disable the System Log Function. Click “**Apply Changes**” to apply your setting.

Note

Please Commit/Reboot if you want to make this settings effective immediately

3.6.8 SNMP

This page is used to configure the SNMP protocol. You can set SNMP related information here.

The screenshot shows the Planet ADSL 2/2+ Router Admin interface. The top navigation bar includes 'Admin', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. Below this is a secondary navigation bar with links: 'Remote Access', 'Comnut/Reboot', 'Password', 'Backup/Restore', 'Upgrade Firmware', 'Time Zone', 'System Log', 'SNMP', 'TR069', and 'ACL'. The main content area is titled 'SNMP Protocol Configuration'. It contains a description: 'This page is used to configure the SNMP protocol. Here you may change the setting for trap ip address, community name, etc..'. Below this, there are settings for 'SNMP:' with radio buttons for 'Disable' and 'Enable' (selected). There is a 'Trap IP Address' field with the value '192.168.1.254'. There are two 'Community name' fields: 'Community name (read-only)' and 'Community name (write-only)', both with the value 'public'. At the bottom, there are 'Apply Changes' and 'Reset' buttons.

Read Community: Select to set the password for incoming Get- and GetNext request from management station.

Write Community: Select to set the password for incoming Set request from management station.

The default password is “**public**”. When you are done making changes, click “**Apply Changes**” to apply your setting.

3.6.9 TR-069

This page is used to configure the TR-069 CPE. Here you may change the setting for the ACS's parameters.

The screenshot shows the Planet ADSL 2/2+ Router configuration interface. The top navigation bar includes 'Admin', 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin' (selected), and 'Diagnostic'. Below this is a secondary navigation bar with links: 'Remote Access', 'Commit/Reboot', 'Password', 'Backup/Restore', 'Upgrade Firmware', 'Time Zone', 'System Log', 'SNMP', 'TR069' (selected), and 'ACL'. The main content area is titled 'TR-069 Configuration'. It contains a description: 'This page is used to configure the TR-069 CPE. Here you may change the setting for the ACS's parameters.' A red note states: 'Note: Please Commit/Reboot if you want to make this settings effective immediately.' The configuration fields are organized into two sections. The first section, 'ACS:', includes 'URL:' (http://), 'User Name:' (username), 'Password:' (password), 'Periodic Inform Enable:' (radio buttons for Disabled and Enabled, with Enabled selected), and 'Periodic Inform Interval:' (300). The second section, 'Connection Request:', includes 'User Name:', 'Password:', 'Path:' (tr069), and 'Port:' (7547).

3.6.10 ACL

Access Control List Configuration

If enabled, permits access to local management services from IP addresses contained in the Access Control List.

The screenshot shows the Planet ADSL 2/2+ Router configuration interface for the ACL section. The top navigation bar is identical to the previous screenshot. The secondary navigation bar includes 'Remote Access', 'Commit/Reboot', 'Password', 'Backup/Restore', 'Upgrade Firmware', 'Time Zone', 'System Log', 'SNMP', 'TR069', and 'ACL' (selected). The main content area is titled 'ACL Configuration'. It contains a description: 'This page is used to configure the IP Address for Access Control List. If ACL is enabled, just these IP address that in the ACL Table can access CPE. Here you can add/delete IP Address.' The 'ACL Capability:' section has radio buttons for 'Disable' (selected) and 'Enable', with an 'Apply Changes' button. The 'Enable:' section has a checked checkbox, a dropdown menu for 'Interface' (LAN), and input fields for 'IP Address:' and 'Subnet Mask:', with an 'Add' button. The 'ACL Table:' section features a table with columns 'Select', 'state', 'Interface', and 'IP Address'. Below the table are 'Delete Selected' and 'Delete All' buttons.

If enable ACL, and then only the effective IP in ACL can access the router.

- Step1** If you want to enable ACL, please choose "Enable" and then press "**Apply Changes**" to apply your setting.
- Step2** Click the Enable checkbox.
- Step3** Enter the host IP address that you want to permit and click "**Add**".
- Step4** Press "take effect" to enable the configuration.

 **Note**

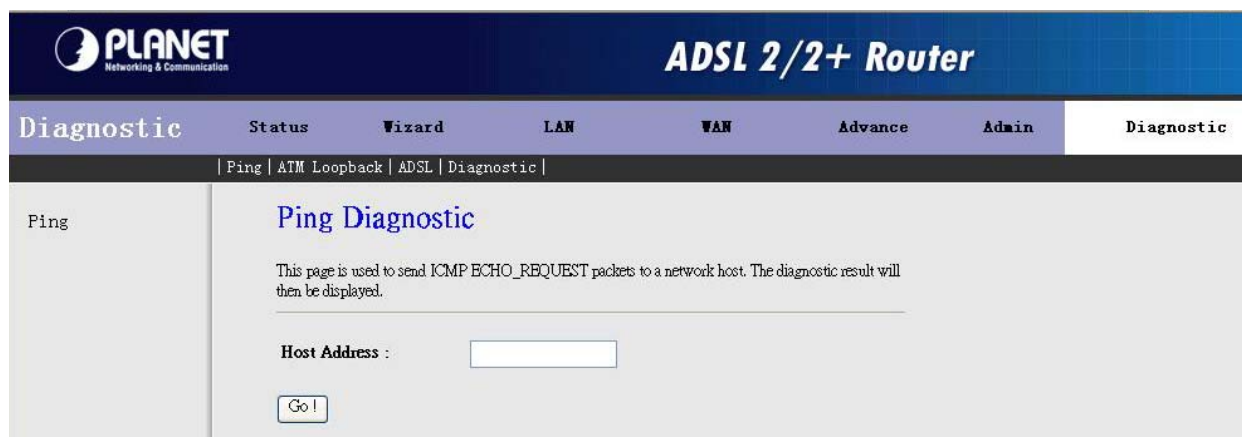
If you choose "Enable" in ACL Capability, please make sure that your host IP is in ACL before it takes effect. Or you will not manage the device from your PC.

3.7 Diagnostic

Your router is capable of testing your network and DSL connection. The individual tests are listed as Ping, ATM Loopback, ADSL and Diagnostic.

3.7.1 Ping

This page is used to send ICMP ECHO_REQUEST packets to network host. The diagnostic result will then be displayed.



The screenshot shows the web interface of a Planet ADSL 2/2+ Router. The top header is dark blue with the Planet logo and the text "ADSL 2/2+ Router". Below the header is a navigation bar with tabs: Diagnostic, Status, Wizard, LAN, WAN, Advance, Admin, and Diagnostic. The "Diagnostic" tab is selected. Under the "Diagnostic" tab, there is a sub-menu with "Ping", "ATM Loopback", "ADSL", and "Diagnostic". The "Ping" sub-menu is selected. The main content area is titled "Ping Diagnostic" and contains the text: "This page is used to send ICMP ECHO_REQUEST packets to a network host. The diagnostic result will then be displayed." Below this text is a form with a label "Host Address :" and a text input field. At the bottom of the form is a button labeled "Go!".

Host Address: Enter the IP address that you wish to test. And then click "**Go!**" button for testing.

3.7.2 ATM Loopback

Connectivity verification is supported by the use of the OAM loopback capability for both VP and VC connections. This page is used to perform the VCC loopback function to check the connectivity of the VCC.

ADSL 2/2+ Router

Diagnostic | Status | Wizard | LAN | WAN | Advance | Admin | **Diagnostic**

| Ping | **ATM Loopback** | ADSL | Diagnostic |

ATM Loopback

OAM Fault Management - Connectivity Verification

Connectivity verification is supported by the use of the OAM loopback capability for both VP and VC connections. This page is used to perform the VOC loopback function to check the connectivity of the VOC.

Select PVC:

☒ 0/33

Flow Type: ☒ F5 Segment ☐ F5 End-to-End

Loopback Location ID:

Select your **PVC** and **Flow Type** that you want to test. Enter the Loopback Location IP and then click “**Go**” for testing.

3.7.3 ADSL

In this page, you can test the ADSL line tone status. Click “Go” to start testing. The test result will come out about 3 minutes later and the page will refresh itself automatically.

Note **This test is for ADSL 2 / 2+ Line only.**

ADSL 2/2+ Router

Diagnostic | Status | Wizard | LAN | WAN | Advance | Admin | **Diagnostic**

| Ping | ATM Loopback | **ADSL** | Diagnostic |

ADSL

Diagnostics -- ADSL

ADSL Tone Diagnostics.

	Downstream	Upstream
Hlin Scale	7580	0
Loop Attenuation(dB)	0.0	0.0
Signal Attenuation(dB)	0.0	0.0
SNR Margin(dB)	0.0	0.0
Attainable Rate(Kbps)	0	0
Output Power(dBm)	0.0	0.0

Tone Number	H.Real	H.Image	SNR	QLN	Hlog
0	0.001	0.000	-32.0	-23.0	-54.1
1	0.000	0.000	-32.0	-23.0	-96.3
2	0.000	0.000	-32.0	-23.0	-96.3
3	0.000	0.000	-32.0	-23.0	-96.3
4	0.000	0.000	-32.0	-23.0	-96.3
5	0.000	0.000	-32.0	-23.0	-96.3
6	0.000	0.000	-32.0	-23.0	-93.9

3.7.4 Diagnostic

The DSL Router is capable of testing your DSL connection. The individual tests are listed below. If a test displays a fail status, click **"Run Diagnostic Test"** button again to make sure the fail status is consistent.

The screenshot shows the web interface of a Planet ADSL 2/2+ Router. The top header is dark blue with the Planet logo and the text "ADSL 2/2+ Router". Below this is a navigation bar with tabs: "Diagnostic" (selected), "Status", "Wizard", "LAN", "WAN", "Advance", and "Admin". Under the "Diagnostic" tab, there is a sub-menu with links: "Ping", "ATM Loopback", "ADSL", and "Diagnostic". The main content area has a left sidebar with the word "Diagnostic" and a main panel titled "Diagnostic Test". The main panel contains a paragraph explaining the router's testing capabilities and a form with a dropdown menu labeled "Select the Internet Connection:" showing "ppp0" and a "Run Diagnostic Test" button.

PLANET
Networking & Communication

ADSL 2/2+ Router

Diagnostic Status Wizard LAN WAN Advance Admin Diagnostic

| Ping | ATM Loopback | ADSL | Diagnostic |

Diagnostic

Diagnostic Test

The DSL Router is capable of testing your DSL connection. The individual tests are listed below. If a test displays a fail status, click "Run Diagnostic Test" button again to make sure the fail status is consistent.

Select the Internet Connection: ppp0

Appendix A: Glossary

Address mask

A bit mask select bits from an Internet address for subnet addressing. The mask is 32 bits long and selects the network portion of the Internet address and one or more bits of the local portion. Sometimes it called subnet mask.

AAL5

ATM Adaptation Layer - This layer maps higher layer user data into ATM cells, making the data suitable for transport through the ATM network.

ADSL

Asymmetric digital subscriber line

ATM

Asynchronous Transfer Mode - A cell-based data transfer technique in which channel demand determines packet allocation. ATM offers fast packet technology, real time, and demand led switching for efficient use of network resources.

AWG

American Wire Gauge - The measurement of thickness of a wire

Bridge

A device connects two or more physical networks and forward packets between them. Bridges can usually be made to filter packets, that is, to forward only certain traffic. Related devices are repeaters which simply forward electrical signals from one cable to the other and full-fledged routers which make routing decisions based on several criteria.

Broadband

Characteristic of any network multiplexes independent network carriers onto a single cable. Broadband technology allows several networks to coexist on one single cable; traffic from one network does not interfere with traffic from another. Broadcast a packet delivery system where a copy of a given packet is given to all hosts attached to the network. Example: Ethernet.

CO

Central Office. Refers to equipment located at a Telco or service provider's office.

CPE

Customer Premises Equipment located in a user's premises

DHCP (Dynamic Host Configuration Protocol)

DHCP is software that automatically assigns IP addresses to client stations logging onto a TCP/IP network. DHCP eliminates having to manually assign permanent IP addresses to every device on your network. DHCP software typically runs in servers and is also found in network devices such as Routers.

DMT

Discrete Multi-Tone frequency signal modulation

Downstream rate

The line rate for return messages or data transfers from the network machine to the user's premises machine.

DSLAM

Digital Subscriber Line Access Multiplex

Dynamic IP Addresses

A dynamic IP address is an IP address that is automatically assigned to a client station (computer, printer, etc.) in a TCP/IP network. Dynamic IP addresses are typically assigned by a DHCP server, which can be a computer on the network or another piece of hardware, such as the Router. A dynamic IP address may change every time your computer connects to the network.

Encapsulation

The technique layer protocols in which a layer adds header information to the protocol data unit (PDU) from the layer above. As an example, in Internet terminology, a packet would contain a header from the physical layer, followed by a header from the network layer (IP), followed by a header from the transport layer (TCP), and followed by the application protocol data.

Ethernet

One of the most common local area network (LAN) wiring schemes, Ethernet has a transmission rate of 10 Mbps.

FTP

File Transfer Protocol. The Internet protocol (and program) transfer files between hosts.

Hop count

A measure of distance between two points on the Internet. It is equivalent to the number of gateways that separate the source and destination.

HTML

Hypertext Markup Language - The page-coding language for the World Wide Web.

HTML browser

A browser used to traverse the Internet, such as Netscape or Microsoft Internet Explorer.

http

Hypertext Transfer Protocol - The protocol carry world-wide-web (www) traffic between a www browser computer and the www server being accessed.

ICMP

Internet Control Message Protocol - The protocol handle errors and control messages at the IP layer. ICMP is actually part of the IP protocol.

Internet address

An IP address is assigned in blocks of numbers to user organizations accessing the Internet. These addresses are established by the United States Department of Defense's Network Information Center. Duplicate addresses can cause major problems on the network, but the NIC trusts organizations to use individual addresses responsibly. Each address is a 32-bit address in the form of x.x.x.x where x is an eight-bit number from 0 to 255. There are three classes: A, B and C, depending on how many computers on the site are likely to be connected.

Internet Protocol (IP)

The network layer protocol for the Internet protocol suite

IP address

The 32-bit address assigned to hosts that want to participate in a TCP/IP Internet.

ISP

Internet service provider - A company allows home and corporate users to connect to the Internet.

MAC

Media Access Control Layer - A sub-layer of the Data Link Layer (Layer 2) of the ISO OSI Model responsible for media control.

MIB

Management Information Base - A collection of objects can be accessed via a network

management protocol, such as SNMP and CMIP (Common Management Information Protocol).

NAT

Network Address Translation - A proposal for IP address reuse, where the local IP address is mapped to a globally unique address.

NVT

Network Virtual Terminal

PAP

Password Authentication Protocol

PORT

The abstraction used in Internet transport protocols to distinguish among multiple simultaneous connections to a single destination host.

POTS

Plain Old Telephone Service - This is the term describe basic telephone service.

PPP

Point-to-Point-Protocol - The successor to SLIP, PPP provides router-to-router and host-to-network connections over both synchronous and asynchronous circuits.

PPPoE

PPP over Ethernet is a protocol for connecting remote hosts to the Internet over an always-on connection by simulating a dial-up connection.

Remote server

A network computer allows a user to log on to the network from a distant location.

RFC

Request for Comments - Refers to documents published by the Internet Engineering Task Force (IETF) proposing standard protocols and procedures for the Internet. RFC can be found at www.ietf.org.

Route

The path that network traffic takes from its source to its destination. The route a datagram may follow can include many gateways and many physical networks. In the Internet, each datagram is routed separately.

Router

A system is responsible for making decisions about which of several paths network (or Internet) traffic will follow. To do this, it uses a routing protocol to gain information about the network and algorithms to choose the best route based on several criteria known as "routing metrics".

Routing Table

Information stored within a router that contains network path and status information. It is used to select the most appropriate route to forward information along.

Routing Information Protocol

Routers periodically exchange information with one another so that they can determine minimum distance paths between sources and destinations.

SNMP

Simple Network Management Protocol - The network management protocol of choice for TCP/IP-based Internet.

SOCKET

- (1) The Berkeley UNIX mechanism for creating a virtual connection between processes.
- (2) IBM term for software interfaces that allow two UNIX application programs to talk via TCP/IP protocols.

Spanning-Tree Bridge Protocol (STP)

Spanning-Tree Bridge Protocol (STP) - Part of an IEEE standard. A mechanism for detecting and preventing loops from occurring in a multi-bridged environment.

When three or more LAN's segments are connected via bridges, a loop can occur. Because of a bridge forwards all packets that are not recognized as being local, some packets can circulate for long periods of time, eventually degrading system performance. This algorithm ensures only one path connects any pair of stations, selecting one bridge as the 'root' bridge, with the highest priority one as identifier, from which all paths should radiate.

Spoofing

A method of fooling network end stations into believing that keep alive signals have come from and returned to the host. Polls are received and returned locally at either end

Static IP Address

A static IP address is an IP address permanently assigned to computer in a TCP/IP network. Static IP addresses are usually assigned to networked devices that are consistently accessed by multiple users, such as Server PCs, or printers. If you are using your Router to share your cable or DSL Internet connection, contact your ISP to see if they have assigned your home a static IP address. You will need that address during your Router's configuration.

Subnet

For routing purposes, IP networks can be divided into logical subnets by using a subnet mask. Values below those of the mask are valid addresses on the subnet.

TCP

Transmission Control Protocol - The major transport protocol in the Internet suite of protocols provides reliable, connection-oriented full-duplex streams.

TFTP

Trivial File Transfer Protocol. A simple file transfer protocol (a simplified version of FTP) that is often boot diskless workstations and other network devices such as routers over a network (typically a LAN).

Telnet

The virtual terminal protocol in the Internet suite of protocols - Allows users of one host to log into a remote host and act as normal terminal users of that host.

Transparent bridging

The intelligence necessary to make relaying decisions exists in the bridge itself and is thus transparent to the communicating workstations. It involves frame forwarding, learning workstation addresses, and ensuring no topology loops exist (in conjunction with the Spanning-Tree algorithm).

UDP

User Datagram Protocol - A connectionless transport protocol that runs on top of TCP/IP's IP. UDP, like TCP, uses IP for delivery; however, unlike TCP, UDP provides for exchange of datagram without acknowledgments or guaranteed delivery. Best suited for small, independent requests, such as requesting a MIB value from an SNMP agent, in which first setting up a connection would take more time than sending the data.

UNI signaling

User Network Interface signaling for ATM communications.

Virtual Connection (VC)

A link that seems and behaves like a dedicated point-to-point line or a system that delivers packets in sequence, as happens on an actual point-to-point network. In reality, the data is delivered across a network via the most appropriate route. The sending and receiving devices do not have to be aware of the options and the route is chosen only when a message is sent. There is no pre-arrangement, so each virtual connection exists only for the duration of that one transmission.

WAN

Wide area network - A data communications network that spans any distance and is usually provided by a public carrier (such as a telephone company or service provider).

EC Declaration of Conformity

For the following equipment:

*Type of Product : ADSL 2/2+ Router
*Model Number : ADE-3410A / ADE-3410B
* Produced by:
Manufacturer's Name : **Planet Technology Corp.**
Manufacturer's Address : 9F, No. 96, Min Chuan Road, Hsin Tien,
Taipei, Taiwan, R.O.C.

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to 1999/5/EC R&TTE.

For the evaluation regarding the R&TTE the following standards were applied:

Emission	EN 55022	(1998)
Harmonic	EN 61000-3-2	(2000)
Flicker	EN 61000-3-3	(1995 + A1)
Immunity	EN 55024	(2003 + A2)
ESD	IEC 61000-4-2	(1995 + A2)
RS	IEC 61000-4-3	(1995 + A1)
EFT/ Burst	IEC 61000-4-4	(1995 + A2)
Surge	IEC 61000-4-5	(1995 + A1)
CS	IEC 61000-4-6	(1996 + A1)
Voltage Disp	IEC 61000-4-11	(1994 + A1)
LVD	EN 60950	(2001)

Responsible for marking this declaration if the:

☒ Manufacturer ☐ Authorized representative established within the EU

Authorized representative established within the EU (if applicable):

Company Name: **Planet Technology Corp.**

Company Address: **9F, No.96, Min Chuan Road, Hsin Tien, Taipei, Taiwan, R.O.C**

Person responsible for making this declaration

Name, Surname **Allen Huang**

Position / Title : **Product Manager**

Taiwan
Place

July, 10th., 2008
Date


Legal Signature

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